Air Trails

MAY 1954 / 35 CENTS

HOBBIES

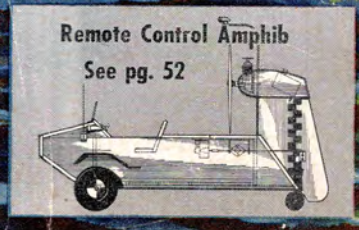
FOR YOUNG MEN

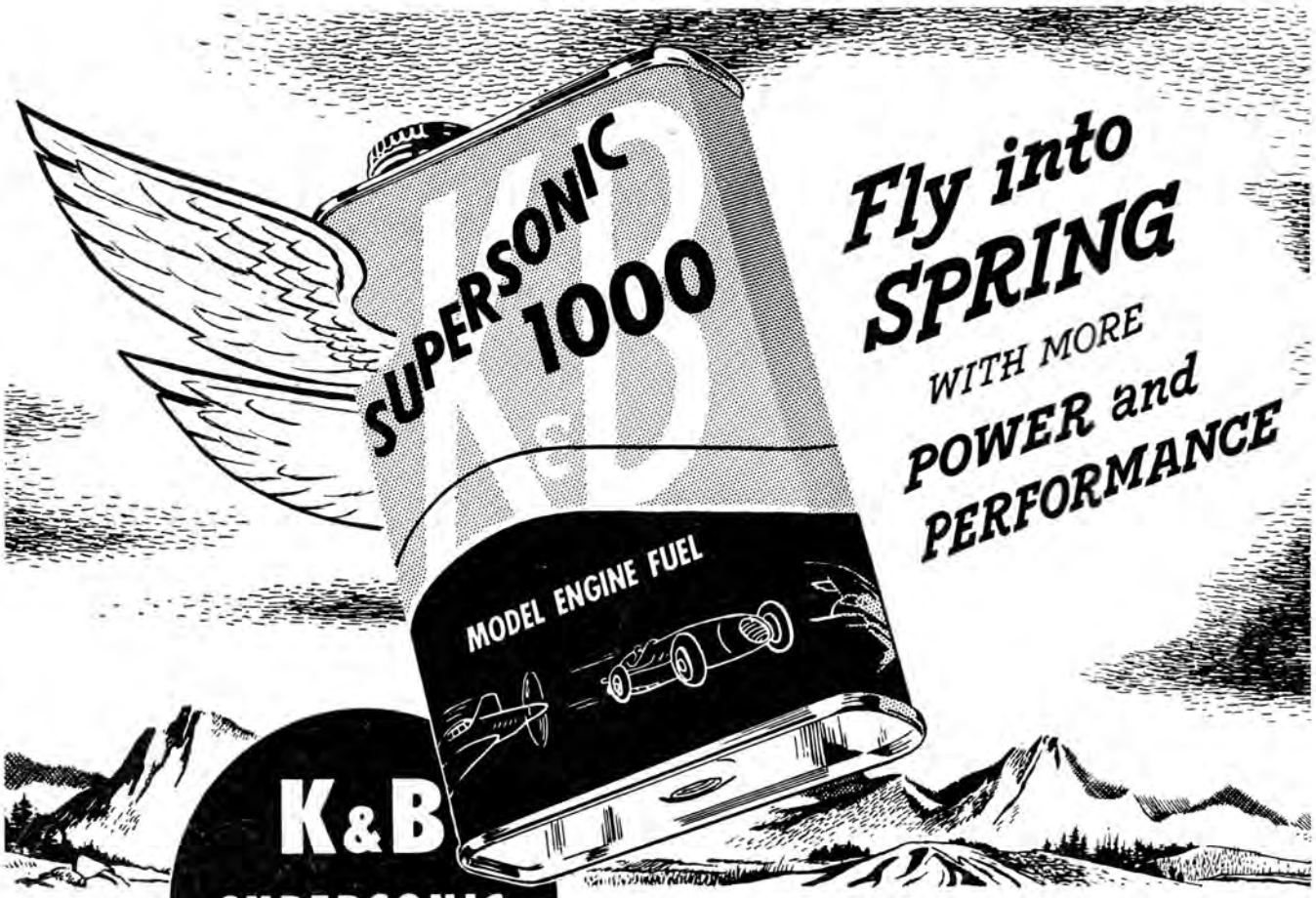
MODEL PLANES • BOATS • CARS • MECHANICS • CONTESTS • SCIENCE

Pilot Your Own Space Saucer—pg. 68

Photo Prizes for Nautilus pix—pg. 32

$500.00 Every Issue for Auto Designs! Shop Projects! Plane Plans and Hobby Photos!





Fly into SPRING

WITH MORE

POWER and PERFORMANCE

K&B SUPERSONIC FUELS

WORLD'S CHAMPION POWER ENGINE...

INTERNATIONAL WORLD POWER CHAMPIONSHIPS • *CRANFIELD, ENGLAND*

FIRST FLASH! The American Team, all flying K & B Torpedo .15 Engines, won the Team Power Event and the coveted Franjo Kluz Team Power Trophy. The Americans won with a total time of 38 minutes, 47 seconds.

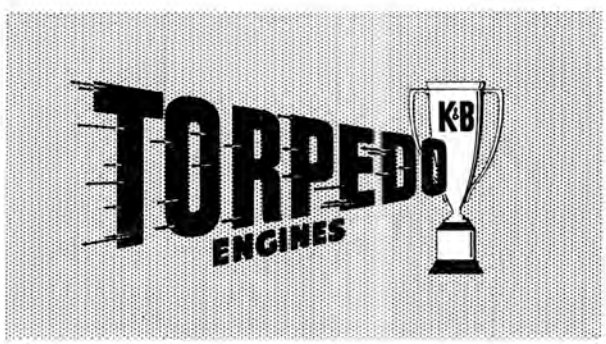
SECOND FLASH! Dave Kneeland, Hickman Hills, Missouri, U.S.A., flying a K & B Torpedo .15 Engine defeated 60 contestants from 14 nations to win the Individual Power Event with a perfect of three 5-minute flights.

$10.95 AT YOUR HOBBY DEALER

K & B *Supersonic Fuels* do deliver more power. Here's the proof! Championship performance in competition year after year after year. Look at the Official Record... MORE FIRST PLACES WON AT THE 1951... 1952... 1953 NATIONALS THAN ALL OTHER FUELS COMBINED!

...a fuel for every engine... every use!

SUPERSONIC ULTRA-GLO, *for ½A engines*. . ½ pts. 55¢, pts. 90¢
SUPERSONIC 1000 . . . *for speed—it's HOT*. . ½ pts. 60¢, pts. 1.00
SUPERSONIC 100 . . . *for free flight*. . . . . ½ pts. 50¢, pts. 80¢
U-control, scale models



K&B MANUFACTURING COMPANY
224 E. PALMER AVE., COMPTON, CALIFORNIA

PARKS COLLEGE offers you
The best possible opportunity for success in all fields of aviation

Are you considering aviation as a career? If so, here are some important facts you should know. Few industries have progressed as fast as aviation, and it is advancing more rapidly now than in the past. Men in aviation who have the ability and background to keep pace with this progress are among the top paid executives in the country.

If YOU want to be one of these men, here are the necessary qualifications. Be willing to apply yourself conscientiously to your work. Equip yourself with the finest possible education that will give you not only technical knowledge, but a background that allows you to create and keep pace with new developments and methods. This education should allow you also to communicate your ideas to other people — a very important requirement for management and executive positions.

Parks College offers you this type of education. Parks gives you technical knowledge — the necessary background for keeping pace with progress, and for assuming a position of responsibility. Parks offers a Bachelor of Science degree in any of three fields — Aeronautical Engineering, Maintenance Engineering, or Aeronautical Administration. Your Parks education will serve you well in the aviation industry the world over.

AIR FORCE ROTC allows you to complete your schooling — without interruption — and receive a commission as second lieutenant in the Air Force Reserve.

NON-CREDIT COURSES CAA approved courses leading to Private, Commercial, Instrument, Flight Instructor, and Multi-Engine Ratings. A & E Mechanics course also available.

(All Parks Schooling Approved for Veterans.)
Next Parks Enrollment Dates: Sept. 1-2, 1954.

Mail this Coupon today!

PARKS COLLEGE OF SAINT LOUIS UNIVERSITY
2054 Cahokia Rd., East St. Louis, Ill.

I am interested in:

- ☐ Aeronautical Engineering
- ☐ Maintenance Engineering
- ☐ Aeronautical Administration
- ☐ Aeronautical Meteorology
- ☐ Flight Courses
- ☐ A & E Mechanic Course
- ☐ Information on Public Law 550

Name..... Age.....

Address..... Zone.....

City..... State.....

FIRST IN AVIATION
PARKS COLLEGE
SINCE 1927

PARKS COLLEGE OF SAINT LOUIS UNIVERSITY

2054 CAHOKIA ROAD • EAST ST. LOUIS, ILL.

Speaking of HOBBIES

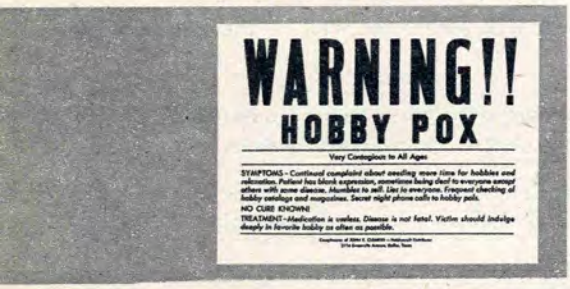
All communications to the editors should be addressed to 304 East 45th St., New York 17 N. Y.

Subscription prices: U. S. and Possessions—$3.50 per year, $6.00 for two years; Canada— $3.50 per year, $6.00 for two years; countries of the Pan American Union—$7.00 per year, $10.00 for two years; elsewhere—$10.00 per year, $14.00 for two years.

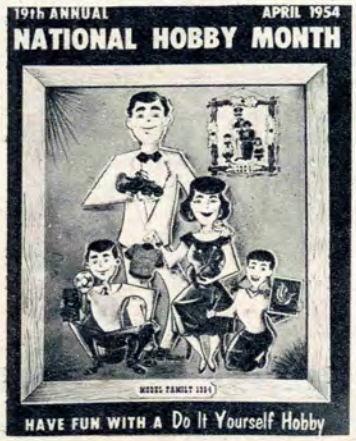
Please advise us if you move, giving old address and new address; allow four weeks for change of address; address subscription mail to Subscription Department, Air Trails HOBBIES For Young Men, 304 East 45th St., New York 17, N. Y.

Here's Where We Work

—And What We See by Night



Sign of the Times



All Together, Now, Men!

How do you get your copy of ATHFYM? Newsstand? Subscription? Read somebody else's? We've been wondering about that a bit since the mag doesn't appear on *every* newsstand in this vast nation of ours . . . unfortunately. Main reason is that there are over 100,000 newsstands! Beaucoup stands, hey, Stan? So I tell you what we're gonna do. For a limited time only—until May 31, 1954 to be exact—our Subscription Department moguls have okayed this deal: all Canadian, U.S. and U.S. Possessions residents can subscribe for the very special rate of $3.00 for the next 12 issues of ATHFYM (those same 12 copies would cost you $4.20 at your newsstand). All you do is send 3 bucks (money, not deer) to Subscription Department #554, Air Trails HOBBIES For Young Men, 304 E. 45th St., New York 17, N. Y., and say you want to take advantage of the special offer detailed in this column.

Where are you located?—people keep asking us. Thought you'd like to know and see. Top pix left by Ewing Galloway shows the two main United Nations buildings in NYC; note we're a half-block away. Second shot by Howard Levy shows the UN "glass-sandwich-on-end" as we see it from the office while burning the midnight oil.

WARNING! ! HOBBY POX—says the sign on our office door. Said sign supplied by comedian John E. Clemens, Dallas (need we say "Texas"?) model-hobby distributor. The prominent red-and-black-on-yellow notice goes on to state: "Very Contagious to ALL AGES. SYMPTOMS—Continual complaint about needing more time for hobbies and relaxation. Patient has blank expression, sometimes being deaf to everyone except others with same disease. Mumbles to self. Lies to everyone (Ed. note: we do???). Frequent checking of hobby catalogs and magazines. Secret night phone calls to hobby pals. NO CURE KNOWN! TREATMENT—Medication is useless. Disease is not fatal. Victim should indulge deeply in favorite hobby as often as possible." Don't know if additional copies are available or not. But a postcard to Johnny at 2114 Greenville Ave., Dallas (Texas, that is) should bring an answer.

April is when we all celebrate "National Hobby Month." During the week of April 8 to 15 we'll work extra hard on our plane-boat-car-and-rail models because that's "National Model Building Week." All this is the effort of the Hobby Guild of America. Your dealer, radio and TV station and newspaper can get belated, but helpful details from HGofA, 550 Fifth Avenue, NYC 36.

Reaction to the new ATHFYM has been pretty good. But one letter about the changeover was quite emphatic: From Seattle, Wash., Chuck Wood, noted air-model designer and contestant, wrote: "We of the Seattle Skyhawks and the Seattle Model Council are quite disturbed . . . at our last club and council meetings (we) voted unanimously to send a protest to you over these changes. We understand that the . . . model airplane section will be slanted toward the advanced builder." 'Tain't so, Chuck, 'tain't so!

Air Trails HOBBIES For Young Men published monthly by Street & Smith Publications, Inc., at 575 Madison Ave., New York 22, N. Y. Entered as second class matter at the post office at New York, N. Y. Authorized as second class mail Post Office Dept., Ottawa, Canada. Copyright 1954 by Street & Smith Publications, Inc., in the United States and countries signatory to the Berne Convention and Pan American Convention. 35c per copy. This issue is Vol. XLII, No. 2. Please advise us if you move; allow four weeks for change of address. Give old and new address when notifying us. Subscription correspondence should be addressed to Subscription Dept., Street & Smith Publications, Inc., 304 E. 45th St., New York 17, N. Y. All characters used in fiction and semi-fiction stories in this magazine are fictitious. We cannot accept responsibility for unsolicited manuscripts or art work. All submissions must include return postage. Printed in 3 U.S.A.

Twenty-five years after Kitty Hawk, in 1928, SPARTAN started training aviation students. Great strides have been made since Kitty Hawk and Wright Brothers' first flight; but compared with today's complex planes, they were quite rudimentary.

SPARTAN saw the demand for mechanics and pilots and set up a school to fill that need. The School built many of its training aids and prepared many of its own texts — even as it does to this day. With the advance of aeronautics, studies were broadened and new courses added until the School became famous throughout America and abroad, with students coming from most foreign nations.

World War II and SPARTAN was chosen by the Air Force to train thousands of young men for service all over the World. Today, as back through the years, SPARTAN enjoys a reputation for complete and thorough training. Here, you can train in the least possible time for a highly-paid position in aviation. You can lay the groundwork that will enable you to get started soon on a successful aeronautical career. Remember . . . the earlier the start the quicker will you achieve recognition. Write today for complete details.

SPARTAN
A UNIVERSITY OF AVIATION
SCHOOL of AERONAUTICS — MAXWELL W. BALFOUR, DIRECTOR
COLLEGE of ENGINEERING — ADDRESS DEPT. AT-54
TULSA, OKLAHOMA

FOR COMPLETE INFORMATION MAIL COUPON TODAY

Maxwell W. Balfour, Director
Spartan School of Aeronautics Dept. AT-54
Tulsa, Oklahoma
Please send your free Catalog immediately.

Name_____ Age_____

Address_____

City_____ State_____

Indicate which of these branches interests you:

☐ Flight ☐ Flight Engineer
☐ Instruments ☐ Link Instructor
☐ A. & E. Mechanics

... the HOBBYIST'S SUPERMARKET of SUPER SAVINGS!

NOWHERE IN THE WORLD will you find as large a selection of AIRPLANES • ENGINES • SPEEDBOATS RACE CARS • ACCESSORIES • ETC. CHECK THIS LIST!

AIRPLANES

Corsair 17" A-AA	2.95
Curtis P40F 20" AA	3.95
Curtiss Hawk P6E 17½" AA	2.95
Curtiss Hawk P6E 23¾" A	4.95
Dynamic 26" A-B	3.80
Fire Baby 19" AA	2.50
Fireboy (incl. Engine)	3.50
Fireboy Biplane 19" AA	3.50
Fireboy Biplane (incl. engine)	9.75
Flip-Flap 24" A	3.50
Flying Clown 28" A-B-C	1.95
Focke Wolfe 190 17" AA	2.95
Folker D-VII 33½" UC A-B-C	5.95
Folker D7 14" AA	2.95
Good News 20" A-B-C	5.95
Great Lakes Trainer 27" A-B	5.95
Grumman Guardian 50" A-B-C	5.95
Guided Star 24" A-B-C	5.95
Guided Starlet 24" AA	2.75
Hell-Racer 9" AA	2.00
Hell-Racer 14" A	3.95
Hell-Racer 15" B	6.50
Hell-Racer 19" C	11.20
Howard Pete 30" B-C-D	5.95
Infant Wagon 20" AA	1.95
Junior Paddlejumper 19" AA	1.95
Junior Stunt 9 27" AA-A	3.48
Junior Stunt 19 34" A	3.98
Junior Stunt 19 34" AA	2.98
Keshi Panther 48" B-C	6.95
Keshi Wildcat 37" A-B	4.48
Keshi Zero 28" B-C	5.95
Keshi Cougar 51" B-C	6.95
Keshi Mustang 48" B-C	6.95
Key 29" B-C	6.95
Kerr-Dot 15" AA-A	2.95
Knockout 18" AA	2.95
LB Duper Zlich 42" A-B	5.95
Little Ace 18" AA-A	1.95
Little Bipe 16" AA-A	1.50
Little Devil 18" AA-A	1.50
Little Mercury 19" AA-A	1.50
Little Mustang 18" AA	1.95
Little Sebre 18" AA	1.95
Lockheed Starfire 23" Jetex	2.49
MPC-7 39" B	4.95
ME 109 Jr. (P.D.Q.) 20" AA	1.50
Meteor 28" A-B-C	5.95
Mini-Zlich 19" AA	1.25
Monocoupe 36" B-C	4.98
Monocoupe "90" A-AA	1.50
Mr. Mulligan 22" B-C (Sterling)	4.95
Mustang 37" A-B (Berkeley)	5.95
Mustang (Sterling) A-B-C 36"	2.95
Mustang (Veco) 48" B-C	7.95
Mustang (Enterprise) 17½" AA-A	1.95
Mustang (Monarch) 20" AA-A	2.95
N.A. P51 16" A (Cons)	4.95
No. Amer. AT6 (SNJ) 31" A-B-C	4.95
No. Amer. AT6 18" AA	1.95
N.A. Navigator 36" AA	6.95
Pepcor 22" A	3.95
Piper Fan 16" AA	1.50
Piper Cub 20" AA	2.00
Piper Cub 35½" A-B-C	4.95
Piper Vagabond 36" A-B-C	3.95
Pitts Special 25" A-B	4.95
Polish Zlich 36" B-C-D	5.95
Primer 18" AA	1.40
PT Trainer 26" A-B	1.99
Puddle Jumper 19" AA	1.50
Quest 30" B	4.95
Reddin 31" A-B	4.95
Rinemaster 42" B-C	11.95
Robert S.T. 36" B-C	5.95
Ryan S.T. AA 17½"	2.50
Scientific 2 in 1 Kit 18" AA	2.50
Sea Bee 15" A	2.50
Senior 9 27"	3.48
Senior 19 34"	3.98
Senior 29 50"	5.98
Senor Paddlejumper 25" A-B	1.95
Sharpy 47" C-D	8.95
Shooting Star A-B-C	10.95
Skylander 18" A-AA	2.50
Slick Trick 18" AA	1.95
Small Fry 17" AA-A	1.95
Smoothie 52" A-B	7.98
Space Master 24" AA-A	2.25
Speedster 12" AA	2.50
Spitfire 17" A	3.95
Spitfire 20" AA	1.50
Spitfire 18" AA	2.98
Sport Rebel 18" AA	1.50
Sportwing 36" A-B-C	3.98
Squew 37" A-B-C	5.75
Stinger 48" B-C-D	6.50
Stinson 22" AA	2.95
Stuntwagon 58" D	7.95
Super Clown 28" B-C	2.95
Super Duper Zlich 52" C-D	8.95
Super Knock-Out 24" A-B	3.50
Super Paddlejumper 25" AA-A	1.95
Super Sportster 21" (Jet)	2.98
Super Stunt Rant 20" A	2.26
Super Zenith 23" A	2.50
Swift Cherlet 18" AA-A	1.95
TD1 24" AA	9.95
T-28 N.A. Trainer 30" B-C	5.95
Texan AT6 18" AA	1.95
Thunderbolt 40" C-D	4.95
Trail Blazer 24" B-C-D	2.95
Trixter Improved Trainer	1.95
Trixter Profile 32"	2.50
Trixter Profile 38" B-C	3.50
Typhoon 19" AA	1.95
Vampire 40" B-C	4.50
Viking 51" C-D	5.75
Vixen 21" AA	1.95
Waco 33" B-C	5.95
Waco Cabin 12" AA	1.50
Warhawk 17" AA-A	1.95
Warhawk 32½" B-C	5.95
Warhawk Bark 45" A-B-C	4.95
Warrior 36" A-B-C	4.95
Wee Duper Zlich 24" AA	2.95
Wee Willie 18" AA-A	1.95
Whirlaway 11" AB	3.95
Wing Ding 18" AA-A-B	2.25
Wing Dingee 16" AA	2.25
Yak (P.D.Q.) 26" B-C	5.95
Yak Jr. (P.D.Q.) 20" AA	1.50
Yak (Sterling) A-B-C	2.95
Zero 22" AA	1.50
Zenith 19" AA-A	2.50
Zero 18" AA	2.95
Zero, Jr. 20" AA-A	1.50
Zlich X-Pendable 36" A-B-C	3.95

FREE-FLIGHT PLANES

Baby Zephyr 28" AA	.98
Badger 72" A-B-C	5.95
Beaver 44" AA	2.95
Bird Dog 36" FF AA	2.50
Bootstrap 40" AA	2.50
Buccaneer B Special 54" B	3.95
Champion 36" A-AA	2.50
Clipper 34" AA	2.95
Cloud-Coaster TR 28" AA	3.50
Cloud-Coaster D2 28" AA	2.95
Commanche 36" AA	2.75
Dakota 24" AA	2.75
Folly 32" AA	1.75
Fw-bar 36" AA	1.75
Fw-bar 65 65" B-C	6.95
Hawk 27" AA	1.50
Heliopian 40" AA	2.95
Jessco Rival 44" AA	2.75
Jesco Streak 32" AA	1.95
Junior Phoenix 36" A	2.25
KIWI 35" AA	2.50
KIWI 44" A	4.50
KIWI ABC 61" A-B-C	6.95
Lift Master 34" AA	2.25
Lil Rascal 27" AA	1.50
Luscombe Sedan 76" C-D	7.50
Mini-Hoser 34 34" AA	1.95
Mini-Hoser 45 45" AA	2.95
Navajo 36" AA	2.50

Buried in This Ad

are most of the new items. Sometimes there isn't time or space to list all of them. But, if available anywhere, we have it.

PAA Master 35" AA	2.50
Ascemaker 40" AA	2.50
Phoenix Skipper 34" AA	2.25
Powerhouse 41" A	3.95
Powerhouse 56" B	6.95
Privateer Flying Boat 36" FF AA	2.95
Profile Powerhouse 24" AA	1.00
Sandy Hoser 70" B-C	6.95
Shadow 32" AA	1.95
Sioux 36" AA	2.75
Skylark 31" AA	2.00
Sniffer 29" AA	1.75
Super Brigadier 50" B	4.95
Taylor Cub 35" AA	2.95
Tank 23" AA	1.50
Zest 33" AA	2.50
Zest 50" A-B	4.95

RADIO CONTROL PLANES

Pinar Tri-Pacer 39" A-B-C	10.95
Rocketraps "A-B-C" 54" AA-A	3.95
Brigadier RC 38" AA-A	1.95
Keshi Buzzer'd 72" A-B-C	10.95
Kitten 24" AA	3.95
Livewire RC 48" AA	4.95
Livewire Cruiser 65" A-B	14.95
Rascal Rudderbug 62" A	6.95
Livewire Sr. 65" A	14.95
Buccaneer B Special 54" B	3.95
Buccaneer C Special 72" C	7.95
Super Brigadier 58" B-C	6.95
Super Buccaneer 90" C-D	10.95
Custom Cavalier 108" D-E	17.50
Luscombe Sedan 76" C-D	7.50

U-CONTROL PLANES

A/2 Twin 25½" AA	2.95
Aeronca Sedan 35½" A-B-C	4.95
Aerosan 22" AA	1.98
Aeromite 17" AA	4.95
Air Racer 18" AA-A	1.39
All Amer. Trainer 21" AA	1.78
All Amer. Stunt Trainer Jr. 26" A-AA	2.50
All Amer. Stunt 36" A-B	4.98
All Amer. Jr. Stunt 51" B-C	6.98
American Boy 18" AA	1.00
Baby Barnstormer 23" AA	2.95
Baby Clown 22" A	1.50
Baby Ere 18" AA-A	2.50
Baby Ere Bipe 16" AA	2.50
Barnstormer 40" A-B	4.95
Beercat 25" C-D	4.95
Beechcraft 16" AA-A	2.95
Bel-Air 18" AA-A	2.95
Bipe Stunt Trainer 25" B-C-D	2.95
Boeing P-26A 17½" AA	2.95
Boeing P26A 18" AA	2.95
Brave 36" A-B-C	4.75
Cal's Whiskers 40" A-B-C	3.95
Cessna 22" AA	1.75
Cessna 34" B-C	4.95
Chief 53" B-C	6.95
Circus Kiese 40" B-C	2.95
Combat Sky Box 36" A-B	2.95

ENGINES

GLO ENGINES

Atwood 049 (UC)	(AA)	4.50
Atwood 049 (FF)	(AA)	4.75
Atwood 061	(AA)	5.50
Atwood Cadet	(AA)	4.95
Cameron Bing	(A)	9.95
Cameron Lapped	(A)	9.95
Cameron .19 two speed	(A)	11.95
Cameron .09 Marine	(A)	9.95
Cameron .09 Marine Diesel	(A)	11.95
Forster 5.29 Glo	(B)	11.20
Forster F.31 Glo	(C)	11.20
Fox 19	(A)	12.50
Fox 29	(B)	14.95
Fox 35	(C)	14.95
Fox 59	(D)	22.50
Infant Torpedo	(AA)	5.50
K & B Glo Torp 29	(B)	15.95
K & B Glo Torp 32	(C)	15.95
K & B Torpedo 19	(A)	13.95
K & B .15 (2-speed)	(A)	16.95
K & B .19 (2-speed)	(A)	16.95
K & B Torpedo 23	(B)	13.95
K & B Torpedo .15	(A)	10.95
K & B Torpedo .09	(AA)	7.95
McCoy 9	(A)	7.95
McCoy 19 Sport	(A)	9.95
McCoy 19 R.H.	(A)	12.50
McCoy 29 Sport	(B)	11.95
McCoy 29 R.H.	(B)	14.95
McCoy 35 R.H.	(C)	14.95
O & R 23 Rv Deluxe	(B)	11.95
O & R 29 Glo	(B)	13.95
O & R 33 Glo	(C)	13.95
O & R 40 Glo	(D)	13.95
O.K. Cub .049	(AA)	4.95
O.K. Cub .049 Plus.	(AA)	5.95
O.K. Cub .049X Plus.	(AA)	6.25
O.K. Cub .049B Plus.	(AA)	4.95
O.K. Cub .074	(A)	6.75
O.K. Cub .074 Plus.	(AA)	6.75
O.K. Cub .14	(A)	8.95
O.K. Hotheed Glo	(B)	10.95
OS 29	(B)	14.95
Royal Baby Spitfire Plus.	(AA)	4.95
Royal Spitfire	(A)	7.95
Royal Fury	(AA)	4.95
Space Bug	(AA)	6.95
Space Bug Jr. .049	(AA)	3.95
Triumph .49 or .61	(A)	18.00
Thermal Hopper (FF)	(AA)	6.95
Veco 29	(B)	14.95
Veco 35	(C)	14.95
Wasp (FF)	(AA)	6.75
Wasp (U-C)	(AA)	6.50
Wee-Mac .049 Plus.	(AA)	6.95

ELECTRIC MOTORS

Dynamite	1.98
Speed Reduction Unit	.98
Dumas Electric Drive Unit	4.50
Outboard	2.95
A.H.J.	1.50
Super Dyne	2.50

IGNITION ENGINES

Dooneymite	(C)	6.95
O & R 23 RV Deluxe	(B)	14.95
O & R 29 Rotary	(B)	14.95
O & R 33	(C)	14.95
O & R 60 Luxe	(D)	24.95
O.K. Hotheed (Sup 29)	(B)	12.95
Phantom F-30	(B)	13.95
Spitfire	(D)	24.95
Thor	(B)	19.95
Wasp Twin	(D)	29.50

RADIO CONTROL

Super Aerotrol "Ready to Operate" Includes Transmitter, Antenna, Receiver, Escapement, Motor, Tubes. Everything to operate & maintain except batteries 99.95
Aerotrol Manual 1.00
Aerotrol Kit 21.95
Aerotrol Escapement Kit 2.95
Super Aerotrol Receiver Kit 13.95
Super Aerotrol Rec. Assb'ld 22.95
Super Aerotrol Transmitter Kit 19.95
Super Aerotrol Trans. Assb'ld 27.95
Super Aerotrol Escapement 3.95
Babcock Transmitter 39.95
Babcock Receiver 49.95
Citizenship Receiver ..... 24.95 & 29.95
Citizenship Transmitter 34.95
Citizenship Escapement 5.95
Control Master #27 Transmitter 29.50
Control Master #FS3 Meter 14.95
Control Master #27RH Rec'vr. 19.95
Good Bros. Escapement 13.50
ECC Transmitter (complete) 27.95
ECC Transmitter 18.95
ECC Receiver 18.95
ECC Escapement 5.00
ECC 3A Relay 6.50
Twin Tube Rec'v'r Kit 19.95
Test Meter (Citizenship) 14.95
Motor Control Unit 4.95
Ballcrank & Horn (RC) ..... .75
No. 15 Battery Box ..... .50
No. 7 Battery Box 1 Cell ..... .20
No. 7 Battery Box 2 Cell ..... .40
No. 7 Battery Box 3 Cell ..... .60
No. 7 Battery Box 4 Cell ..... .75
JAS Transmitter Tube 2.25
XPG1 Receiver Tube 3.50
Zero 3 Millisemeter 2.75
Zero 50 Milliammeter 3.00
White Antenna ..... .50
Also All R.C. Parts and Batteries and anything advertised

ACCESSORIES

PROPELLERS

Tornado	
5" D 3-4-5-6-7-8 P	.15
6" D 2-3-4-5-6-7-8 P	.15
7" D 2-3-4-5-6-8-9 P	.20
8" D 2-3-4-5-6-7-8 P	.25
9" D 2-3-4-5-6-7 P	.25
10" D 2-3-4-5-6 P	.30
Semper Plastic 5½"–3in.– 6" 4in.	.65
Keyson plastic 5/3, 5½/4, 6/3, 6/4, 6/5	.15c; 7/4
Top-Flite—6" in 3,4,5p—20c; 7" in 4,6p; 8" in 3½,6,8,10p; 9" in 4,6,8,12p; 10" in 3½,6,8,12p—25c; 11" in 4,6,8,10, 12p; 12" in 5,8p; 13" 5½p; 14" 6p—30c.	
No-Torque, Power, Super Special, Veco. Testors, Berkeley.	.50

METAL GAS TANKS

Dale Stunt Tanks—All Sizes ..... .65

#1—1½"x1½"x3½"	#4—1½"x1½"x3½"
#2—2½"x1½"x3¼"	#5—1½"x1½"x4"
#3—2½"x1½"x4"	#12—1½"x1½"x5"
#19—1½"x2½"x5½"	
#20—2½"x1½"x5½"	

DOPES (Cont'l U.S.A. Only)
We carry all lines of dope and cement: Aeroglass, Comet, Monogram, Testors, etc.

U-C ACCESSORIES

Adjustable Push Rod Set	.25
BERKELEY control lines	
.004 or .006x2-35	.35
.006x8-50	.50
.008, .010, .012: 2'-55	.50
.008, .010, .012, .014 2-70	.66
.012, 0.16: 2-150	1.00
Stranded .015, .021 55' 1.00; 70' 1.25; 200'	2.50
Berkeley Metal Flight Reel	1.25
Berkeley Metal Handle	1.00
Controliner Flight Reel (with wire) AA—1.95; A-B	2.50
Elevator control bars; Veco	.25 & .30
Elevator hinges 4 for	.10
E-Z Plastic Control Handle	.85
Flex Lead-in Wire AA or AB 3 ft.	.15
Lemon Clips A, B, C or D Pr.	.10
PYLON control lines	
.008, .010, .012, .014, .016	.60
dia. 2-55' lines	
.010, .012, .014, .016, dia. 2-70' lines	.75
Flexible 2-55' 1.50; 2-70'	1.95
Keshi Pushrod Keeper	.10
Nylon Lines AA	.25
Pylon Aircraft 2"—20; 3"	.25
Pylon Conn. Clips A, B or C, 2 for	.15
Pylon Control Line Reel	1.25
Pylon Flex Lead-in Wire, 6 Ft.	.25
Pylon Plastic Handle 5"	.85
T. D. Handy Reel & Handle ½A	1.50
T. D. Deluxe Reel & Handle	2.95
Thumb Saltcrank & Elev. Horn	.75
Swivels, small (56 or.); large	.20
Handy Reel (Consol)	2.95
Handy Safety Thong	.75
U-Reely Contr—7.50; cable	8.50
Veco Ballcrank 2"—25; 3"	.30
Wood Control Handle	.25

MISCELLANEOUS

Glo Engine Handbook	1.00
Spitfire Ste Plug Clip	.15
Batt. Box Ped., Medium, Regular	.40
Brass Tubing 1/16"; 3/32", 1/8"	.20
Copper Tubing 1/8" OD, per ft.	.20
Finger Guard	.25
Fuel Pump (pt. or ½ pt.)	.66
Fuel Pump Unit	.25
Pylon Fuel Bulb Pump 2 oz. 4 oz.	.79
Handy Boy Fuel Dispenser	1.25
Presto Disc Starter	.25
Pylon Engine Starter	1.95; 2.50
Metal Motor Mounts, Sm Large	.50
Black Neoprene Tubing, per foot	.30
Transparent (req. or AA) ft.	.20
Spitfire Timer	2.95
Austin Fuel-off Timer	1.95
Hillcrest Fuel Shutoff	1.25
D.K. Shutoff Valve	1.25
No. 70 oil, 3 oz—25c—pint	.60
Plastic Fuelpass 19" set of 2	.50
Pen Wrench Key	.25
Plywood (6"x12") 1/16"—25c; 1/8"—30c; ¼"—35c per yard	.25
Nylon (White or Yellow) yd.	2.25
Socket Plug Wrench, 4-way	.60
Flexible Needle Valves; Cub, Royal Spitfire, Sniper-49cc; Wasp, Baby Spit, Infant, Torp Jr., Torpo 49—39c; Universal Needle Valve (A-B-C engines) 50c; Hotheed Jr. 49cc	.25
Needle Valve Extension Flexible	.25
McCoy Speed Needle Valve	.50
Nitrotec	3.00
Pylon Starting Stand	1.75
E-Z Minimount 1½A)	1.25
Pilot Heads .08, .10, .20	.50
Landing Gear Spade Bolts	.25
Landing Gear J Bolts	.25
Bolts ½"–¾" 1"; 1½"–1½" 2"	12/.20
Grant's Model Airplane Design	3.75
A.M.A. Manual	5.00
Scorometer Decals (100)	.15
Small Parts Case	.50
Aeroglass Plastic Balsa Tube	.50
Rubbing Compound	.25
Aeroglass Wax	.40
Aeroglass Rubbing Compound	.40
Plane Kleaner	.50

MODEL RAILROADERS!
Did you know that AHC now carries a complete line of HO GAUGE RAILROAD EQUIPMENT? Send 25c for catalog.

MODEL BOATS

Chris-Craft Challenger 33" C-D	9.75
Chris-Craft 26" C-D	6.75
Chris-Craft 25" BCD	6.25
Chris-Craft Runabout 25" BCD	6.25
Heroe 25" B-C-D	6.25
Owens Yacht 25" B-C-D	6.25
Silverton 25" BCD	6.25
Buckeye prefab. 17" A-B-C	4.98
Buckeye Jr. 13½" AA-A	2.95
Buckeye Cabin Jr. 13½" AA-A	3.95
C.C. Riviera 12" AA	2.95
C.C. Riviera 12½" AA-A	2.50
C.C. Catalina 15½" B-C	11.95
C.C. Outboard Cruiser 18" AA	2.95
C.C. Special 12½" AA-A	3.50
Higgins Speedster 16½" AA-A	4.95
Richardson Sedan 17" AA-A	8.95
Royal Skimmer (Incl. Engine)	10.95
Spitcraft Plastic (Incl. Engine)	14.95
Spitcraft 17" AA-A	7.95
Starline C.C. Buco 19" AA-A	7.95
C.C. Exp. Cruiser 14" AA-A	3.50
Streaker 12" AA	3.75
Sea Maid 12" AA	2.95
Sea Maid 27" A-B	7.98
C.C. 21' Express AA	2.95
C.C. 21" Sportsman AA	2.95
Century Resorter 12" AA	3.25
Century Seamaster 17" AA	2.95
Jetex 29" Radio Control A-B	9.96
Scientific Sea Hawk 12" AA	2.50
XP-300 Dream Boat 12" AA	1.95
Sea Bird RC 25" AA-C	14.95
Sea Bird 14" AA	1.95

RACE CARS

Automite with Wen Mac Engine	10.95
Half-pint	2.98
O & R Complete with Engine	19.95
Rodey Complete with Engine	16.95

SPECIAL BONUS OFFERS

32 items WORTH OVER $5.00 **FREE** of extra cost with every **GAS ENGINE**

(With Diesel or glo engines, all needed items are given.) Other bonus items include: Quality Coil — Everlast Condenser — Hi-Tension Wire — Stranded Ignition Wire — Insulated Coil Holder — Correct Size Prop — Complete Instructions — Battery Box — Slide Switch — 24-Page Engine Manual — 4 Mounting Bolts — Mounting Washers — Prop Nut — Spark or Glo Plug — Leg Bolt — Trouble Shooting Chart — No. 70 Oil — Membership in Modelcrafters of America — AHC Guarantee — 128-Page GIANT 2-Color Illustrated Catalog — Free Postage — Packing and Insurance if ordered by mail.

11 items WORTH OVER $2.00 **FREE** of extra charge with **GAS PLANES**

Correct-Size Rubber Wheels — Giant Construction Manual — Complete Full-Size Plans — Insignia — Membership in Modelcrafters of America — 128-Page GIANT 2-Color Illustrated Catalog — Free Postage — Packing and Insurance if ordered by mail.

(Bonuses on planes selling at over $1.50 only)

ORDER NOW! Get all these AHC "EXTRAS"

ENGINE TRADE-IN SERVICE

While America's Hobby Center, Inc. does not sell used engines, we have a constant request from schools, clubs and overseas soldiers for second-hand engines for experimental work. If you have a used engine, we will be glad to accept it in trade for any merchandise (motors, planes, boats, accessories, etc.) except Flying Outfits and a few other exceptions, listed in our ads or catalog. Just send in your engine (with your name and address) as the following schedule indicates:

Your old Engine PLUS				
$3.75 = $5.00	11.25 = 15.00	Credit towards your Purchase
7.50 = 10.00	15.00 = 20.00	
22.50 = 30.00		

We will match any offer in this magazine. Just enclose their ad.
You will receive the usual free premiums, subscriptions, etc.

ENGINE PARTS! EVERY PART for EVERY ENGINE listed on these pages is IN STOCK at America's Hobby Center. Send today for the parts you need to keep your engine in flying condition.

WE ALSO SELL TO DEALERS

Did you know that Mod-Ad Agency, Inc., the wholesale affiliate of America's Hobby Center, Inc., is one of the fastest growing jobbers in the business?
We know your problems because we have your problems! Write for sample catalog (ready for your imprint) and our famous 9-point program—the reasons why more dealers are doing business with us. Includes our 60-day return privilege, etc. Special data if you are going into business. We ship anywhere in the world.
Send 10¢ for catalog, etc.
Write to
MOD-AD AGENCY, Inc.
156 West 22nd Street,
New York 11, N. Y.

2 ENGINE BARGAINS

O. & R. .60 SIDEPORT ENGINE. Discontinued number. Regularly $16.50. Your choice of ignition or Glo for only $6.95

ANDERSON SPITFIRE CLASS D .645 ENGINE. One of the most powerful engines. Regularly $24.95. Your choice of ignition for $14.95 or Glo for $15.45.

And with engine, you can buy 6 matching 45c PROPS for $1.00

Both BRAND NEW and FULLY GUARANTEED

SPECIAL SOUVENIR BARGAIN

The manufacturer of a well-known engine, after selling 30,000 at $9.95 has decided to go out of production. We made a special purchase of his remaining 1,000 complete sets of finished and unfinished CASTINGS and PARTS: cylinder, piston, piston pin, connecting rod, needle valve, gas line, timer, crank shaft, crank case, cam, etc., including screws, gaskets, nuts, etc.

You get a complete set, except spark plug and tank. An interesting souvenir of a model engine in the raw for your den or desk.

No. .19 . . . $1.00 per COMPLETE SET

SPECIAL BARGAIN IN PROPELLERS

15 ASSORTED FOR $1.00

We have purchased 50,000 assorted GAS MODEL PROPELLERS from the country's largest prop manufacturer.
They are all PERFECT and range from Champion semi-finished (listing at $ for $1.00) to finished and lacquered props that sell up to 45c each regularly. Various pitches, in sizes from 7" to 14".
No selections, please, but we will send you a fine assortment of 15 for $1.00. If accompanied by an order for anything advertised in this magazine. MONEY BACK GUARANTEE.

HOW TO ORDER

Send payment in full. No stamps, no C.O.D.'s.
Address your order to us at the branch office nearest to you:

Dept. T-54 156 West 22nd St., New York 11, New York
Dept. T-54 1065 Broadway, Brooklyn 21, N. Y.
Dept. T-54 55 E. Washington St., Chicago 2, Illinois
Dept. T-54 Room 230, 742 Market St., San Francisco 2, Cal.
Dept. T-54 Room 306, 427 Carondelet St., New Orleans, La.
Dept. T-54 965 Gas & Electric Bldg., Denver 2, Colorado

Use convenient order form on Page 9

WE DUPLICATE ANY OFFER made by any other advertiser. Attach ANY ad to your order—and take advantage of the AHC "extras."

READ THIS ENTIRE MAGAZINE FROM COVER TO COVER . . . EVERYTHING ADVERTISED CAN BE ORDERED FROM AHC.

Branches Coast-To-Coast

AMERICA'S HOBBY CENTER, Inc.

1931 **23rd YEAR** 1954

America's Largest Source of Models & Supplies

4 STAR GUARANTEE

★ To give complete satisfaction or your money refunded ★ To save you money
★ To insure safe delivery anywhere in the world ★ To deliver what we advertise

COMPLETE FLYING OUTFITS

Worth Twice Our Combination Price!

Man . . . what a buy! Imagine—you get a COMPLETE FLYING OUTFIT at less than half price. That's right, a U-Control PLANE plus your choice of a well-known factory assembled Ignition or Glo ENGINE plus ALL ACCESSORIES plus all the BONUS "extras" listed below. Here's everything you need, complete with easy-to-follow full size plans and instructions, in one purchase that SAVES YOU FROM $10 to $12. Thousands of hobbyists have already taken advantage of these sensational values. Choose yours NOW!

Believe it or not! 2 COMPLETE PLANES Make and fly BOTH these 18" profile models

F-86 SABRE PLUS F-51 MUSTANG

PLUS ACCESSORIES AND BONUS EXTRAS

PLUS

SPACE BUG JR., .049

BIG $10 OUTFIT FOR ONLY $5.49

With O.K. Cub .049—$6.39

YOU NAME IT — WE SUPPLY IT!

MAKE UP YOUR OWN FLYING OUTFIT if you wish! Name your own combination of ANY ENGINE AND PLANE listed on the opposite page or advertised ANYWHERE in this magazine. We'll supply it and throw in our SPECIAL BONUS items at no extra cost. Just order from us or write for price.

SPECIAL BONUS OFFER

45 items WORTH OVER $10.00 FREE of extra cost with every complete flying outfit of plane and engine.

Correct Size Finished Propeller — Log Book — Spark or Glo Plug with Gasket — Complete Engine Instructions — Genuine Engine Handbook — Engine Adjustment Chart — Metal Fuel Tank and Gas Line — Metal Battery Box — Wilco Quality Coil — 12" Hi-Tension Lead Wire and End Clips — 18" Insulated Ignition Wire — Ignition Slide Switch — Coil Holder and Mount — Everlast Condenser — SAE #70 Oil — 4 Ignition Wiring Lugs — 72 Insignias — Giant Book on Control-Liners — How to Build and Fly Them — Cement — Sandpaper — Metal Bellcrank with Bolt, Nut and Washer — Elevator Horn — Elevator Hinges — Lead-In Wire — Push-Rod Wire — U-Control Handle — 100 ft. U-Control Stainless Steel Wire and Reel — Membership in Modelcrafters of America — 128-page 2-color Catalog — Postage — Packing — Insurance — Ignition parts not needed with glo-engines not included.

NOTE! You may substitute any plane or engine of equal value for any plane or engine included in these offers. Take your choice from listings on opposite page.

DELUXE BARGAIN COMBO

Your choice of

Scientific's 16" and 18" wingspan control-line models. Extra deluxe kits PERFECTLY and COMPLETELY PREFABRICATED. Beautiful models you will be proud to fly. A cinch to build in only one evening.

PLUS ROYAL SPITFIRE .065

Most powerful 1/2A engine

PLUS ACCESSORIES AND BONUS EXTRAS

$15 VALUE FOR ONLY $9.95

SAVE on This POWERED RACE CAR COMBO

Scientific's HALF-PINT RACER

PLUS O.K. CUB .049 ENGINE

$7.95

Complete with all accessories (except fuel and battery). Features direct wheel drive. Five minutes after you open the package you can race this car at over 40 m.p.h. on any smooth surface.

ORDER NOW! Get all these AHC "EXTRAS"

AHC SPEEDBOAT SPECIAL

Chris-Craft Riviera RUNABOUT

Your CHOICE of the SCIENTIFIC 12" model (featuring one-pc. carved balsa hull) or BERKELEY'S 12" model (pre-fabricated parts) . . . both terrific Speed-boat "thrillers".

PLUS O.K. CUB .049 ENGINE or ELECTRIC MOTOR

PLUS

Every accessory you need, including: all metal parts—flywheel and propeller, drive shaft, etc. PLUS 15 bonus "EXTRAS" at no extra cost!

SCIENTIFIC RIVIERA		BERKELEY RIVIERA	
with Cub .049	with Electric Motor	with Cub .049	with Electric Motor
$8.50	$4.95	$7.95	$4.50

BIG $10 Value Only $7.50

Your choice of one of these prefabricated Scientific 22" span U-Control planes:

PLUS ATWOOD .049

PLUS OR O.K. CUB .049

ALL ACCESSORIES AND BONUS EXTRAS

BIG SAVINGS on AHC's Famous 5 ACES OUTFIT

Your choice of any of these Scientific prefabbed 22" U-C planes: AERONCA SEDAN, CESSNA, PIPER CUB, STINSON (illustrated elsewhere on this page)

PLUS SPACE BUG JR., .049 $5.55 or CUB .049 ENGINE $5.95

PLUS ACCESSORIES AND BONUS EXTRAS

A $10.00 VALUE

SAVE 33-51%

SPECIAL PURCHASE • DISCONTINUED MODELS FAMOUS FREE FLIGHT PLANES

We have a limited supply of these "closeout-special" Consolidated models . . . all bargain priced. At these prices they'll go fast. RUSH YOUR ORDER!

DIAMOND DEMON 48" R, Reg. $2.95 — 1.50	JERSEY JAVELIN 48" R, Reg. $3.95 — 1.95	PACER C 60°C Reg. $4.95 — 3.50
ROAMER 45° A-B Reg. $2.95 — 1.95	ROCKETEER 40" A-B Reg. $2.95 — 1.95	STRATOS 42" A Reg. $2.95 — 1.95
ZIPPER 32" A Reg. $2.50 — 1.95	All models in A-1 condition . . . guaranteed by AHC's famous money-back guarantee.	

DECAL BARGAIN

$1.00

Just look what you get: 1-3/8" AMA decals, 62 black decals (2 complete sets of numbers plus alphabet and extra letters), 1 set of 4 star & bar 2", 6 picture decals 2" x 4", 3 sheets of solid colors, 1 sheet checkerboard decals, 6 strips of solid color, plus Tips and Hints on use of decals. A REAL BARGAIN . . . WORTH MANY $$$$.

$1.00

SUPER SPECIAL FLYING OUTFITS!

TRAIL BLAZER

You'll love this beauty with carved lower fuselage-half, fully formed aluminum upper half, balsa sheet wing (no tissue used), balsa tail surfaces, plywood engine mount, rubber wheels. Comes with schematic drawings with step-by-step plans, detail paint schemes. 24" Wingspan.

PLUS CHOOSE ONE $12.50

YOUR CHOICE OF ANY OF THESE ENGINES:

McCoy .19 Glo | Thor Ignition | Cameron .19 Glo

READY-TO-FLY-PLANES

AEROMITE $9.95

A really beautiful red plastic job. 17" wingspan with AA Glo Engine, Prop Spinner, Tank, etc., already installed. Shock-absorbing spring-steel Landing Gear. Jim Walker U-Control for precision and stunt flying, plastic Control Handle, Nylon Control Cord.

A J FIREBABY $7.85

You can't beat this beautifully finished and painted "baby"—she's even fuel-proofed. 19" wingspan. Includes new "slow-motion" propeller and engine.

A J FIREBABY BIPLANE $9.75

It's a terrific stunt ship—this biplane version of the famous FIREBABY. 19" span. Painted and fuel-proofed. Complete with Supercharged Royal Spitfire engine.

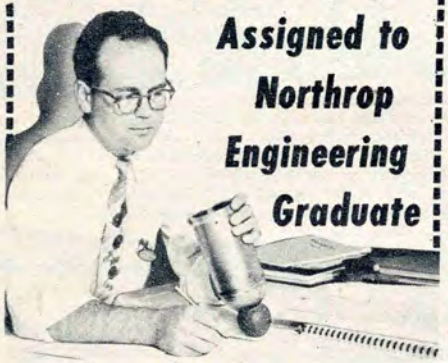
Thimble Drome TD-1

Of course you've heard of it. This completely assembled deluxe model features an all aluminum wing (24" span). Comes complete - ready to fly - with Space Bug engine, control reel, battery wires, control lines, etc., etc.

$19.95

TURN PAGE FOR MORE AHC SUPER BARGAINS AND HANDY ORDER FORM

"CLASSIFIED" Projects Assigned to Northrop Engineering Graduate



Roland Gagon, a graduate of Northrop Aeronautical Institute, is now employed by a large aircraft manufacturer as an "optical engineer" in the Special Weapons Division. His work is interesting, secret and vital to our defense activities. In addition to his regular work, Gagon has co-invented various aircraft and optical devices, for which patent applications have been made. His Northrop Engineering training helped make this work possible, as well as his successful career in Aeronautical Engineering.

EMPLOYERS WAITING FOR NORTHROP GRADUATES

Almost without exception, Northrop graduates have chosen their place of employment BEFORE GRADUATION. This is because the fine reputation of Northrop-trained men has spread throughout the Aviation Industry and has created a "waiting list" for Northrop graduates. As a Northrop student, you are assured unsurpassed, practical, thorough aviation training—*in the shortest possible time.* Why not join men like Roland Gagon and the hundreds of other successful Northrop Graduates who are progressing rapidly in the great Aviation Industry?

GET STARTED NOW!

Choose the specialized branch of aviation training you prefer from the following "industry recognized" courses:

AERONAUTICAL ENGINEERING TECHNOLOGY— *Internationally recognized Engineering Training.*

AIRCRAFT MAINTENANCE ENGINEERING TECHNOLOGY— *Combining features of Engineering and Maintenance Courses.*

MASTER AIRCRAFT AND ENGINE MECHANIC — *Leads to A & E Certificate of CAA.*

JET ENGINE OVERHAUL AND MAINTENANCE — *Jet engine training has now become a specialty.*

Fill in and mail coupon below for FREE CATALOG. Do it now. No obligation.

ATTENTION KOREA VETERANS Northrop Aeronautical Institute is fully approved for your training and for all other veteran training.

Northrop
Aeronautical Institute
An Accredited Technical Institute
1133 W. Arbor Vitae Street
Inglewood 1, California

MAIL COUPON FOR FULL INFORMATION

NORTHROP AERONAUTICAL INSTITUTE 7N17
1133 W. Arbor Vitae Street, Inglewood 1, California

Please send me immediately the Northrop catalog, employment data, and schedule of class starting dates. I am interested in:

- ☐ Aeronautical Engineering Technology
- ☐ Aircraft Maintenance Engineering Technology
- ☐ Master Aircraft and Engine Mechanic
- ☐ Jet Engine Overhaul and Maintenance

Name_____ Age____

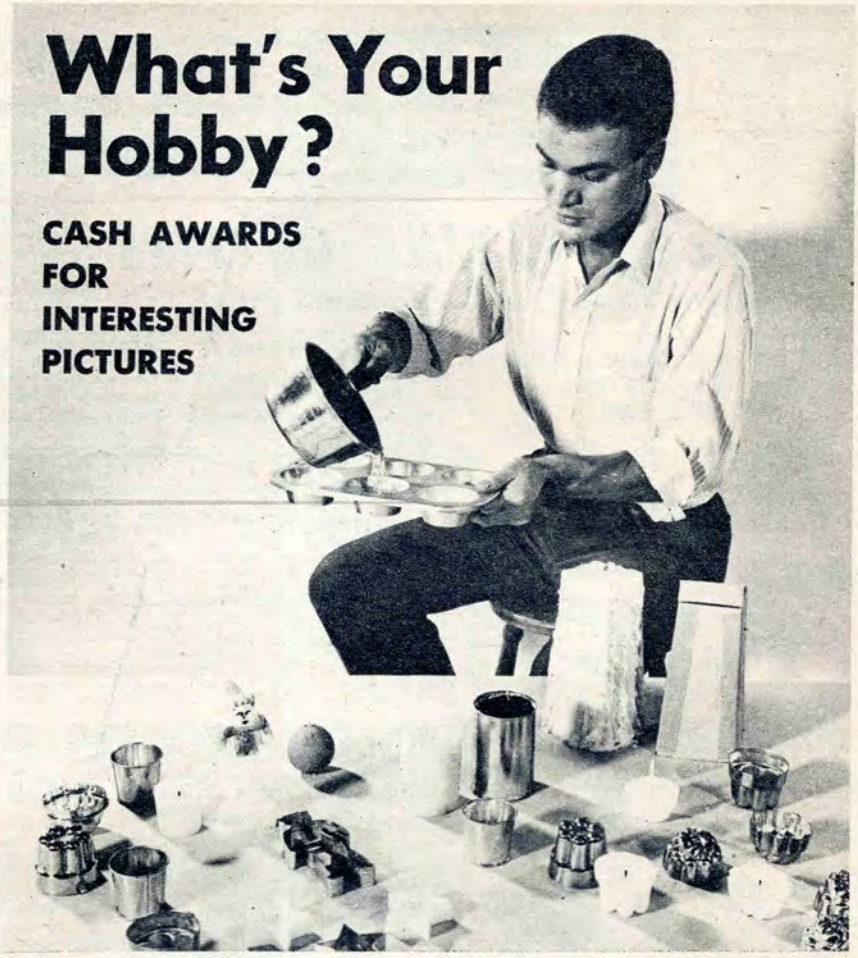
Address_____

City_____ Zone____ State_____

Veterans: Check here ☐ for Special Veteran Training Information.

What's Your Hobby?

CASH AWARDS FOR INTERESTING PICTURES

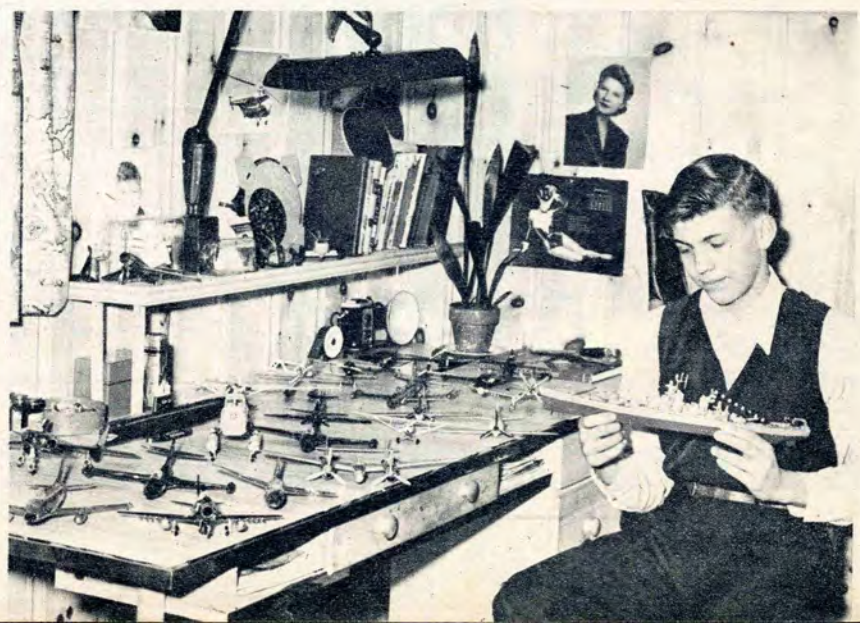


In the old days before electric lights, candle making was a lucrative art. It still can be, though with this fellow it is a hobby. Many intricate shapes are possible.

For Every Picture Used Here We Will Pay $25.00

Photos must be accompanied by description of your hobby, how you got started. Has it helped you plan ahead; produce revenue? Why do you recommend it to others? Send letter and photo showing you engaged in your favorite hobby to "What's your Hobby?" c/o Air Trails HOBBIES For Young Men, 304 E. 45th St., New York, 17., N. Y.

Plastic modeler par excellence, 16-year-old Bob Wintersaler of Hicksville, N. Y., is shown here with his collection of some 30 plastic models that he built in his spare time. His ambition is to study aircraft design and mechanics upon graduation from high school. An ardent reader of aviation subjects, he feels that his books and model activities are foundations for his career.



AIR NOTES

FIRST Air Force convertiplane designation assigned to Bell Aircraft for XV-3. Tilting-rotor type has rotor-propeller combination mounted on wings. These act as helicopter rotors for take-off, tilt forward as propellers when "plane" attains cruising speed. . . . FOR GLIDER enthusiasts Schweizer Aircraft, Elmira, N.Y. will have kit of their new 1-place 1-26 sailplane. Prototype has flown; work now under way for CAA O.K. of kit.

NEW TYPE air-to-air pressure refueling system pumps fuel into British Swift or Hunter jet fighters 200 gallons a minute. . . . HELICOPTERS may replace the DC-3 for short-haul commercial transportation, says Douglas Aircraft chief project engineer J. B. Edwards. . . . NEW MODEL Convair B-36 in production at Consolidated Vultee's Texas plant designated B-36J. Gross weight upped from 358,000 to 400,000 lbs. enables it to carry additional fuel and bombs; landing gear "beefed up" to support increased weight. Convair has Air Force order to modify many RB-36 reconnaissance bombers into carriers for RF-84F Thunderstreak reco-fighters.

CANADA built more jet fighters in 1953 than piston engine types! Majority were U.S. designs such as Lockheed T-33 jet trainer and F-86 fighter. . . . CUSTER Channel Wing plane moved to Oxnard, Calif., has made numerous successful flights. First 5-minute hop of twin-engine cabin prototype was last summer.

The Shadow
Unusual adventures of a man whose dual existence is the nemesis of the criminal mind
A weekly mystery feature of the
Mutual
BROADCASTING SYSTEM
MBS

EVERYTHING anywhere in this magazine can be ordered from AHC

ORDER NOW!

Copyright 1953 America's Hobby Center, Inc.

N. Y. City MODELERS
Two Stores to Serve You
Largest stock in the country at either of our two stores...

Experts on hand to help you with your problems. Complete stock including engine parts and service.

156 WEST 22nd STREET NEW YORK CITY

1065 BROADWAY BROOKLYN, N. Y.

SOLDIERS! SAILORS! MARINES!
Orders placed through us get special attention. We understand your problems and take special care of your orders. No postage or packing charges on orders for over $1.00.

CANADIANS & FOREIGN MODELERS!
You save plenty by ordering from us. We accept your currency at market value. Add 10% for postage and packing (minimum 50¢).

HOW TO ORDER Send payment in full. No stamps, no C.O.D.'s. Address your order to your nearest AHC branch office. Include 25¢ extra if order is under $1.00.

AMERICA'S HOBBY CENTER INC.

156 West 22nd St., New York 11, New York
1065 Broadway, Brooklyn 21, N. Y.
55 E. Washington Street, Chicago 2, Illinois
Rm. 230, 742 Market St., San Francisco 2, California
Rm. 306, 427 Carondelet St., New Orleans, La.
965 Gas & Electric Bldg., Denver 2, Colorado

Please RUSH me the following: **DEPT. T-54**
PLEASE PRINT

Name _____

Street Address _____ Amount Enclosed _____

City _____ Zone _____ State _____

Page	Quantity	Name & Description of Items	Cost Each	Total
➧	ONE ONE ONE	ENGINE TROUBLE TRACER & AID MANUAL SPEED INDICATOR CHARTS FLIGHT LOG BOOK	FREE with each order	
			Total	

24 HOUR SERVICE AT ALL TIMES

24 HOUR SERVICE

SAVE TIME!
USE THIS HANDY ORDER FORM

Branch offices, conveniently located coast-to-coast, airmail your orders to our N. Y. headquarters for immediate shipment.

GUARANTEED
Safe Delivery
Anywhere in the WORLD

FREE AHC "BARGAIN BULLETIN"
Lists dozens of big bargains. Send a self-addressed, stamped envelope today for your FREE copy.

DELUXE HOBBY CATALOGS

25¢ 128 page 2-color 9" x 6" catalog, fully illustrated. Over 10,000 items, including gas, glo, diesel, and jet engines, rubber powered planes, boats, cars, solids of all kinds, tools, engine parts, etc., etc.

10¢ 64 page 2-color 9" x 6" illustrated catalog. Free flight and U-Control planes, engines, accessories, rubber powered planes, solids, boats, cars. Over 5000 items.

FREE Fine jumbo catalog of thousands of hobby items: Plane, boat, car, engines, accessories, solids, gas, rubber, etc., etc.

ONLY **25¢** EACH

WORKBENCH EDITIONS of the famous Winston books (Reg. $1.00 each) for only 25¢ ea.
GLO ENGINE HANDBOOK. Tells all about the theory and operation of glo engines. ☐
CONTROL LINERS. How to build and fly them. Covers subject from A to Z. ☐
GAS MODEL PLANE CONSTRUCTION. The answers to every problem you will ever meet. ☐

America's most demanded
STUNT MOTOR

the
FOX 35
$14.95

Unexcelled performance... easy starting, light weight, steady running and durable. The choice of modelers the world over!

Flown by America's leading kit designers
BOB ELLIOT AND JIM SAFTIG... BERKELEY
HAROLD DE BOLT... DE BOLT
HI JOHNSON... KENHI

See the entire FOX line at your dealer
FOX 19 • FOX 29 • FOX 35 • FOX 59

FOX MANUFACTURING CO., INC.
7401 Varna, North Hollywood, California

Hell Razors!

TOPS IN SPEED

'A' $5.95; 'B' $6.50; 'C'-'D' $6.95; New ½A Hell Razor, 9" span $2

159.23 m.p.h.—highest official time since 1949 in AMA contest! New and better magnesium castings.

NEW ANTI-FOAMING HELL RAZOR FUEL

A blend of the finest chemicals with synthetic oil— $1.25 pint

Send Postcard for FREE illustrated circular—for these amazing offers

- ½A FLYING SCALE MODELS
- RACING SAILBOAT KITS
- HELL RAZORS
- HELL RAZOR FUEL
- CATS WHISKERS
- MPC-7-MAGNESIUM FUSELAGE
- HANDY BOY FUEL TOTER
- TABLETOWN SCENIC COFFEE TABLE
- HANDY REEL
- SAFETY THONG
- GUIDED STAR
- STARLET

ConSOLIDated
3087 3rd Ave. (ATH-5) New York 56, N. Y.

HOBBY BOOKSHELF

You'll enjoy a book that enables the owner of conventional toy type trains to combine them with scale equipment into a fascinating hobby—model railroading. "The Model Railroad Book" by Commander Warren F. Morgan, a hard-cover volume by Arco Publishing Co. ($2), is a library edition of the less expensive soft-covered newsstand book. The ideas in this book benefit beginners as well as experts on layouts, backgrounds, scenery, construction of kits. Guaranteed to make an enthusiastic railroader of any reader. . . . If one wants to get off the ground and really go places, "Space Travel" authored by Kenneth Gatland and Arthur Hunesch, published by the Philosophical Society ($4.75), will take you to Mars and worlds beyond. The reader goes from the early discovery of explosive force to the present-day status of rocket development. This is but a brief interlude while you refuel, ration and outfit for an expedition to Mars. After reading of the conditions that will be met on arrival and the means used for survival on that planet, you'll be ready to sign on for the first trip into space. . . . While you're "out of this world" you'll want to read "Expedition to Earth" by Arthur Clark, a soft-covered edition in Ballantine Books (35¢). It's a compilation of eleven science-fiction tales devoted to the doings of strange creatures on their arrival to this earth some thousands of years in the future. . . . Irving Mandell brings us back to earth with his paper-covered book "How to Protect Your Invention" by Oceana Publications. This book takes the inventive reader step by step through the legal involvements of protecting a good idea. This is a dollar well spent for any neophyte inventor. . . . Few of us are aware that the United States Government is the largest publisher in the world. The assistance it can give in almost any field of endeavor is clearly demonstrated by W. Philip Leidy in "A Popular Guide to Government Publications," Columbia University Press, Inc. ($3). This book is suggested for purchase by clubs, libraries and schools as a reference manual. Government books and pamphlets are described under their titles, each with its price. One title that caught our eye was "Outboard Motors" listed as a 155 page, illustrated booklet described as a manual for recommended maintenance and inspection and an all-around trouble-shooter's handbook—all this for 40¢. How wrong can one go—especially if he is constantly nursing a beat-up outboard motor? However, this is just a sample of one of the thousands of interesting titles found in Mr. Leidy's book. . . . "Memoirs of a Pilot" written by Robert Hal Bowman and published by Vantage Press, lets the reader experience with the author-pilot the magic of night-flying, the thrill of soaring over the earth on a clear sunlit day, as well as one's thoughts and impressions while flying alone on instruments. Don't miss the chapter on crack-ups, for here the causes, factual CAA reports and the author's observations provide a new insight into aviation.

Although we've contacted almost every publishing house in the U. S., precious few have submitted books to be reviewed here; most send an uninspired catalog. We better understand now why so many more people chew gum than read books—many publishers apparently don't know how to publicize their own wares.

Anyhoo, here are a few titles from the Viking Press (18 E. 48th St., New York 17, N. Y.). We haven't had the privilege of examining these books personally but they sound interesting and you might ask your librarian if they're available. Not much data is given on number of pages, illustrations, etc.; sorry. "Weathercraft" with photos, weather maps tells you how to assemble and operate a home weather station ($2); by Athelstan F. Spilhaus. "Superliner S. S. United States" by Henry Billings ($3); a review of North Atlantic navigation from Yankee Clippers to the new Blue Ribbon winner, showing how marine engineers have overcome the hazards of "the most dangerous of all seaways" (be interesting to know whose quotes those are). Due out this month is what sounds like a real good 'un: "V-2, The Inside Story of Peenemünde and of Hitler's 'Secret Weapon' that Came Too Late." By Dr. Walter Dornberger, ex-German Army General. Introduction by Willy Ley. $5 (5⅝ x 8⅜", 320 pages, illustrated). Author directed the Nazi experimental rocket base.

—William J. Lowry

Everything Under Control

News, Views, Comment on Radio Control Planes, Boats, Vehicles by H. G. McEntee

■ Ever since this Column was started, we have been printing pictures, circuits and sketches of useful R/C ideas, and find our readers get a lot of useful info from them. While we have always had as many or more than we could use, we know for sure that some really hot tricks have never reached us—in many cases because the originator just thought they were nothing special, or maybe he was too lazy to write.

Starting with this issue, we will make it worth while for such R/C experimenters to shoot this dope in to us; photos will bring from $5 to $10, sketches of equipment or circuits from $10 to $25,

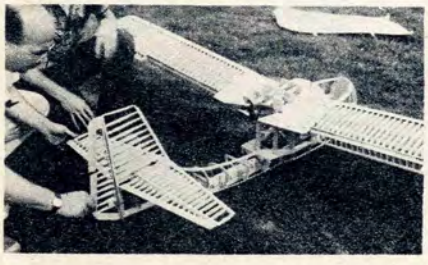
L. R. Purdy (shot by Forrest Cole) with fine flying scale R/C Navion.

depending upon worth and complexity. In the photo line, we are especially interested in shots of unusual planes or equipment, not just run-of-the-mill stuff. The pix may be from small size on up to 8 x 10's, but sharpness, clarity and good backgrounds are all most important elements to shoot for.

For equipment sketches and circuits, just a rough pencil job will do, as we have all such material made up in final form here. Send 'em all to A. T. Hobbies, care of "Everything Under Control." Go ahead—swamp us!

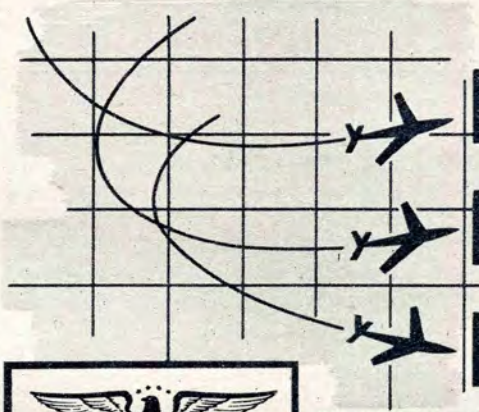
(*Continued on page* 79)

From Cole: Gene Landers of Atlanta. British tone control, 2 Bonners, flaps, elevator, ailerons, rudder!



CHOOSE YOUR PLACE IN AVIATION

with Embry-Riddle — Univ. of Miami training



FOR TOP POSITIONS

FOR HIGH-PAY ACTION

FOR IMMEDIATE SECURITY

Embry-Riddle International
SCHOOL OF AVIATION
MIAMI 30, FLORIDA
TRAIN IN MIAMI...AIR CAPITAL OF THE WORLD

You'll find success on the ground or in the sky with Embry-Riddle—oldest and best known name in aviation training. Accelerated 1 to 4-year courses give your career the fastest possible start . . . thorough, practical, up-to-the-minute training assures complete proficiency, eliminates non-essential study. Act today to live, train and play in South Florida's perfect year-'round climate. Write for complete information now!

MAIL THIS COUPON TODAY! — TRAINING AUTHORIZED UNDER G. I. BILLS

I am interested in . . .

☐ Business-Pilot
☐ Aviation Administration
☐ Aero Design and Technology

TOP POSITIONS are goal of joint Embry-Riddle-University of Miami 2-yr. Business-Pilot (flight and technology), 4-yr. Aviation Administration (BBA degree in management), and 2-yr. Design and Technology (includes engineering drafting) courses. There's no ceiling to advancement for qualified men!

☐ Private Pilot
☐ Commercial Pilot
☐ Instrument Rating

HIGH-PAY ACTION for men who want to move fast awaits Embry-Riddle trained pilots. Best instructors, up-to-date aircraft, superb year-'round flying conditions, backed by 28 yrs. experience training today's aviation leaders.

☐ A & E Mechanic
☐ A & E combined with Private Pilot
☐ A & E combined with Commercial Pilot

IMMEDIATE SECURITY at good pay assured. Embry-Riddle accredited technician graduates are sought by entire aviation industry. Learn fast with modern equipment including jet...live aircraft. Combination training provides double opportunity for airmen with dual pilot-technician ability.

DEAN of ADMISSIONS
Dept. 97
EMBRY-RIDDLE SCHOOL OF AVIATION
MIAMI 30, FLORIDA
Please send immediately illustrated catalog and full details on courses checked above.

Please Print

Name _____
Address _____
City _____
State _____ Age _____
I am a (check one) ☐ veteran, ☐ non-veteran.

SULTANA

Armed Schooner of Boston, 1767

A beautiful seagoing schooner on 3/16" scale—large enough for complete detail. Plans by Chapelle. Kit to M-S standards includes machine carved hardwood hull, special castings, wood materials & cordage for the completed model..... **$8.50**

and now ready **FLYING FISH**

Clipper Ship of Boston, 1851

McKay's magnificent ship on 1/8" scale. A large model, 28" hull, 3 sheets of plans by Scott, rigging plan in 2 colors; machine carved hull, wood parts, castings and parts necessary for the complete model..... **$39.50**

See these kits at better dealers, Coast to Coast.

Send 25c for our catalog describing 18 interesting ship kits and numerous fittings.

MODEL SHIPWAYS
39 West Fort Lee Rd. Bogota, N. J.

K&O

FINEST IN MODEL BOATS

KITS • MOTORS
DRIVE UNITS
ACCESSORIES

Everything Complete

NEW • IMPROVED

THE Royal Blue "SPEED MASTER"
ELECTRIC • REVERSIBLE
OUTBOARD MOTOR

$2.95

★ MORE POWER
★ MORE SPEED

Features carbon brushes perm magnet, new improved propeller unit, finer precision quality thruout! Operates on 3 to 9 volt dry cell batteries. Guaranteed.

NEW ELECTRIC
INBOARD MOTOR

POWER PACKED

A "HUM-DINGER"
NICKEL-PLATED AND GRAY

No. 107A Electric Motor
Size, 2¼x3½x1⅜

$4.95

Operates on 6 to 12 volt flashlight batteries—guaranteed unexcelled in power, speed, quality, compactness and price.

OTHER K&O PRODUCTS

include Speedster Kits, 12" 4.95, 16" 11.95—Ready built Speedster Boats 4.95—14.95—Gas Engine Screw Sets, 5 sizes 3.95 to 7.95—Electric Drive Units 1.95 to 4.95—Electric Motors, 5 sizes 2.00 to 4.95—complete line nickel-plated Model Boat Fittings.

K&O

AT YOUR HOBBY SHOP, TOY OR DEPT. STORE

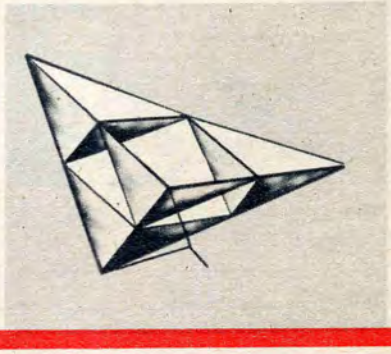
K&O Models, INC.

8719 PARTHENIA PLACE • SEPULVEDA, CALIF

HOBBY

Bull's-Eye! Masculine ashtray in 3 dimensions faithfully reproduces Colt Peacemaker .45 cal. 1873 revolver, bullets; has imprinted short history of gun. 4" x 8" in natural colors on ivory china. Hazel Jasper (142 E. 45th, NYC 17—$5.35 by mail)

See Here! Compact Kodaslide Pocket Viewer by Eastman Kodak ($1.95 at photo shops). Magnifies 4 times; 21/32" x 2⅞" x 2¼" when folded. Accommodates 2" x 2" cardboard or glass slide-mounted transparencies. Ground, polished optical glass lens.



Firefly. Tetrahedronal kite by Robey Specialties (2836 Westbrook Ave., Indianapolis 21, Ind.—69c by mail). Patented single plane construction; balsa sticks cut to length and angled; plastic covering; full size plans; tail included. Get string, let's go!

All Kits: Completely Prefabricated! — 100% Grade AAA Balsa!!! — Formed Wire Gear

CIRCUS KING

THE KING OF STUNT!!
A LION TAMER IN COMBAT !!!

SENSATIONAL PERFORMANCE!!

40" SPAN CLASS B & C.

$2.95

MOST BEAUTIFUL OF ALL PROFILES

EASIEST IN ITS CLASS TO BUILD!!! FINEST MATERIALS!

FAMOUS PDQ CLOWNS
designed by MATT KANIA

Baby Clown 22" Span A-A
A Full Stunt Marvel! $1.50

Flying Clown 27" Span A-C
A Contest Winner! only $1.95

Super-Clown 38" Span B-C
A Full Flap Giant! only $2.95

JUNIOR PROFILE COMBAT FLYERS $1.50

MUSTANG
SPITFIRE ME-109 BEARCAT JAP ZERO KOREAN TAK

22" Span Class ½ A-A

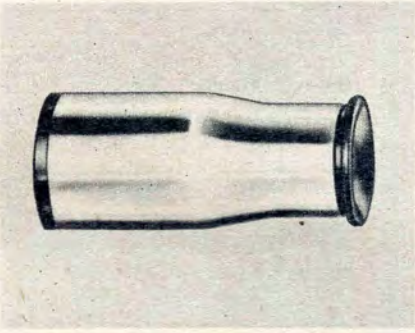
LIL SCRAPPER $1.50

Control-Line Sport Flyer
14" Span Class ½ A

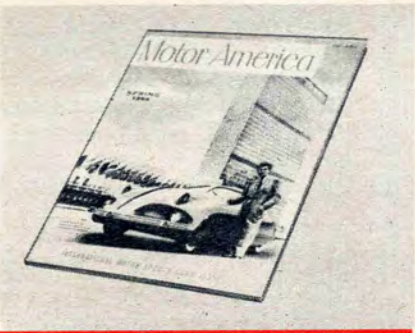
P-D-Q PRODUCTS CO., MILLVILLE, N.J.

SHOWCASE

Star Explorer. Ingenious 9″ x 9″ device locates and identifies stars and constellations any hour of the night, any night of the year. Junior Astronomy Club, Hayden Planetarium, Central Pk. West, NYC (50c—reductions for schools in quantity).



Tiny-Tell. Telescope 2″ long when closed, ⅞″ diameter; precision ground lens, easily focused. Sharp focus from 2′ to infinity. Satin chrome finish, black trim. United Binocular Co. (9043 S. Western Ave., Chicago 20, Ill.—price is $3.95 by mail).



Motor America. This is Herb Shriner's annual sportscar and auto compendium, 112 pages. Authors include many of America's top car designers, writers, illustrators and drivers. $1 by mail from Motor America, 133 East 54th St., New York, N. Y.

Jim Walker

Firebaby Biplane

Stunts like a dream and has power to spare. Royal Spitfire engine has Jim Walker "Supercharger" modification for greater power, instant starting, fuel economy. Buy it ready to fly. All parts finished, painted, fuel-proofed. Span 19 in., wt. with motor 4½ oz.

Complete with engine $9.75
Without engine 3.50

A-J AIRCRAFT CO.
1166 N. E. 31st Ave., Portland 12, Oregon

12 beautiful power boat construction kits—21" to 33½" length. $2.95 to $9.75. Write for free literature on boats, motors, fittings. At all hobby stores. Chris-Craft, Owens, Harbor, Vinyard, Colonial. Large boat construction from factory plans. U. S. A. and Armed Services only.

DUMAS PRODUCTS
2114 S. Alvernon, Rt. 8 Box 953, Tucson, Arizona
World's Largest Builder of Motor Boat Models

BADGER

WING SPAN 72" CLASS A-B-C .19 TO .35 ENGINES

The easiest built freeflight on the market today, with a skyrocket climb and perfect transition from power to a table top glide. A completely new design with phenominal airfoils.

COUGAR

WIN SPAN 54" SUPER STUNT .29 TO .35 ENGINES

Designed to meet the modelers need for simple construction, while maintaining outstanding maneuverability under all conditions. Known the world over for its dependability and superior performance.

PANTHER

WING AREA 508" STUNT SPECIAL .29 TO .35 ENGINES

Spectacular flying at its best. The most beautiful stunt model that can be bought. As nice to fly as it is to build. Your friends will envy you if you fly the PANTHER.

WILDCAT

WING SPAN 37" FULL STUNT .19 TO .35 ENGINES

The backbone of the country's stunt and sport flying. More Wildcats are sold than all other models in its class. For all around sport, fly the Wildcat and you fly the best.

BUZZER'D

WING SPAN 72" RADIO CONTROL .19 TO .35 ENGINES

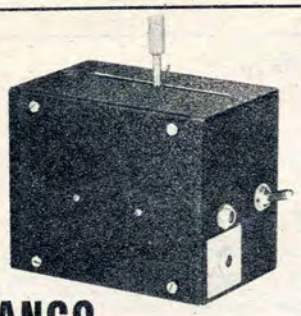
Written testimonials prove the Buzzer'd easier to build, easier to fly, with positive control in power and glide. Thousands of flights logged. All types of radios used successfully.

BOBCAT

WING SPAN 37" FULL STUNT .19 TO .35 ENGINES

From beginner to full stunt flyer, go the way of the Bobcat and you can't go wrong. It builds easy and it flys easy. The kit is complete and the price is right. A beginners friend.

FLY WITH
KENHI



STANCO PROPORTIONAL UNIT

Fly true 100% proportional control offered by

STANCO MANUFACTURERS

120 East 6th Street, Clifton, N. J.

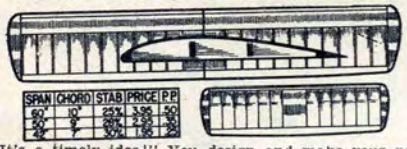
Completely assembled (3"x4"x5"). Not an electrical box. Precision machined parts. No tubes or relays. Built for quality.

Priced at **$25.00**

BIG R/C WHEEL NEWS!!

For those dream landings, try R/C Wheels. Designed for rough flying. 50 lbs. bounce safe on pair. Large volume balloon type. Pure black rubber. Heavy duty walls. One piece dural hub. Tire-stays-on Hub guarantee. Now ready: 3½" Dia. (3 oz.) Size. $3.50 per Pair, P.P.

R/C WING-STAB KITS!!



SPAN	CHORD	STAB	PRICE	P.P.
60"	10"	25%	3.95	50
50"	9"	20%	2.95	30
42"	7"	30%	1.95	25

"It's a timely idea!" You design and make your pet fuselage without wasting time on wing and stab. Ribs die-cut. Edges shaped and notched. Try a set today! Please include Postage.

5-1 R/C WINDER

Ever find yourself short winded? 1½" Dia. gear case easily fits in your pocket. $1.25 P.P. 1952 and 1953 YEAR BOOKS can help you very much. Give them a try. $1.00 each. P.P.

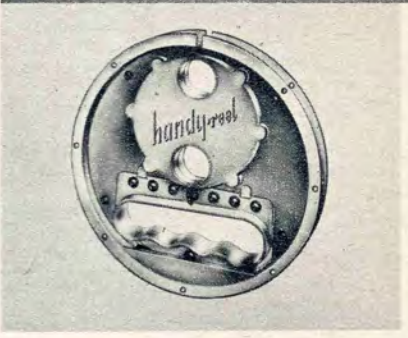
JAP TISSUE

Colors: R.Y.B.W. & O. 25 sheets for $2.00 postpaid.

MODEL AIRCRAFT COMPANY

Box 333 Sta. D New York 3, N. Y.

HOBBY



Really Handy! It separates into hand contour-shape handle and storage reel for any type control lines. By Price-Driscoll (520 5th Ave., NYC 36, $2.95). Tested to 100 lb. pull; has line adjustment feature. Of hi-impact plastic.

Money Maker? Said to be worth $8 when made—it's a non-glare television lamp. Comes in kit from Cleveland Crafts (c/o Howe, 14617 Caldwell, Cleveland 11, Ohio—$2.50 plus postage). 13" high, 7" dia. Wrought iron frame, reed, rubber feet.

Racy Stuff. "The World's Famous Racing Aircraft 1925-1953" (Aerolit, Box 1349, Glendale, Calif.—$1.75) by John W. Underwood has pictures, "1-½-½" views of racing aircraft plus data on winners in the big races. Good printing.

KRUGER Pistols *Wholesale!* $3.00 post paid

.12 CALIBER

FIRED BY .14 MG. POWDER CHARGE

Crafted after famous German Luger design. Not an air or CO_2 gun. This is a small bore gun that actually shoots .12 caliber lead bullets fired by .14 mg. powder charge. Beautiful gun . . . ideal for target shooting. 4" steel barrel. Overall length 8¾". This amazingly low price is due to new ball and cap design, direct factory-to-you sales. Comes with 50 bullets. Send for extra bullets or available at stores. Money back if not satisfied.

Blue-black finish

Knurled Styrene Stock

SINGLE SHOT

Limited offer, Adults only.

KRUGER CORP., Dept. 82, Kruger Building
2801 West Valley Blvd., Alhambra, Calif.
Please send . . . Kruger pistols, $3 each
Payment of $ . . . enclosed (No C.O.D.'s)

NAME . . . . . CITY . . . . .

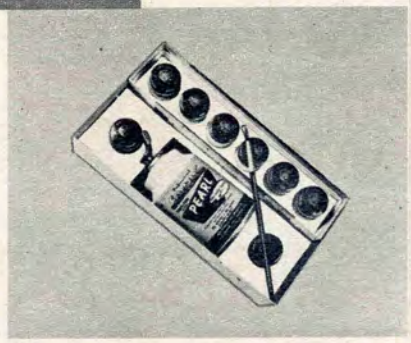
ADDRESS . . . . . STATE . . . . .

Fly Safely

- IF YOU FLY CONTROL LINE MODELS, don't stand within 500 feet of any power, phone or light lines!
- IF YOU FLY FREE FLIGHT MODELS, don't permit autos or spectators within 500 feet of your take-off site!

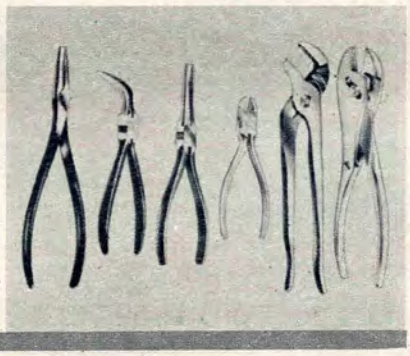
MODEL AVIATION SAFETY COUNCIL

SHOWCASE



Pearl Spray Kit. Everything necessary for pearling items of almost any texture. By Professional Art Products (845 S. Wabash Ave., Chicago 5, Ill.—$6.95). Reflects any color it is sprayed over to show through with mother-of-pearl finish.

Nice for Novice. "Building Your First Flying Models," helpful 32-page, 25c booklet. X-acto Crescent Products (48-41 Van Dam St., Long Island City 1, N. Y.). Plans for simple air-models. Schools can write regarding quantity orders.



Left to Right. New Proto pliers by Plomb Tool Co.: long reach, short jaw needle nose; curved thin needle nose; long thin needle nose; midget diagonal (4½"); multiple grooved joint; multi-purpose. Increases hand pressure 10 times.

AMCO 350 BB .21 cu. in.

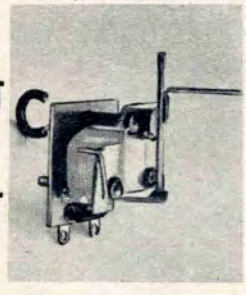
33⅓% TRADE IN ALLOW.

1. Send in a trade-in, any make any condition, and get ⅓ off on any of the engines listed below. Send check, money order or C.O.D.
2. NO KIDDING—extra nice or unusual engine trade-ins bring much more. INQUIRE!
3. USED ENGINES—next four listings for 10c.
4. 1 YEAR Aeromodeller subscription FREE with each full price purchase over $12.00—value $3.25.
5. Orders, acknowledgments, replies—24-hour service.

ENGINES	LIST	LESS ⅓
Atwood Cadet	3.95	2.64
Atwood .049 FF	4.75	3.17
Atwood .051 FF	5.50	3.67
Cameron Ring	9.95	6.62
Cameron Lapped	9.95	6.62
Elf Twin Glo	21.50	14.34
Elf Four Glo	45.50	30.34
Elf Four Ign	49.50	33.00
Fox 19	12.50	8.34
Fox 29	14.95	9.97
Fox 35	14.95	9.97
Fox 59	22.50	15.00
K & B Infant .020	5.50	3.67
K & B 15	10.95	7.30
K & B G. T. 29	15.95	10.62
K & B 6. T. 32	15.95	10.62
K & B 19	13.95	9.29
K & B 192 sp	16.95	11.22
McCoy 9	7.95	5.30
McCoy 19 Sport	9.95	6.62
McCoy 19 RH	10.95	7.30
McCoy 29 Sport	11.95	7.97
McCoy 29 RH	14.95	9.97
McCoy 60 RH	22.50	15.00
O.K. .049 B	4.95	3.30
O.K. Cub .099	6.95	4.64
O.K. Cub .074	5.95	3.97
All disp. Cu. In.	LIST	LESS ⅓
O.K. Cub .14	8.95	5.97
Space Bug	6.95	4.64
Super Tigre G 20	16.95	11.22
Speed BB	16.95	11.22
Super Tigre G 21	22.50	15.00
Speed BB .29	22.50	15.00
Thermal Hopper	6.95	
Atwood Triumph	18.00	12.00
.49 or .51		
Veco .29 or .31	14.95	9.97
DIESEL ENGINES		
McCoy .049	5.95	3.97
McCoy .099	7.95	5.30
OK .075	7.50	5.00
OK .049	5.95	3.97
FOREIGN DIESELS		
Allb. Bambi		
Allbon Dart .033	8.95	5.97
Allbon Spit .066	8.95	5.97
Allbon Jov .099e	8.95	5.97
Allbon Rad. Back Plates		1.00
Elfin .099	10.95	7.30
Elfin .15	11.95	7.97
D C 350 .21	10.95	7.30
Amco 350 BB	16.95	11.22
Amco 350 PB	14.95	9.97

FAST ENGINE EXCHANGE, BOX 821, WARREN, OHIO

SMALLEST AND LIGHTEST



SELF-NEUTRALIZING ESCAPEMENT

Rugged and compact, this BONNER escapement is the finest on today's market. Completely factory assembled and **adjusted.** Thousands now in use. Insist on BONNER.

Wt. - ½ oz.; ⅛" Rubber Drive; 2 volt; ⅞"x⅞" Mtg. Plate

$6.95

At your dealers or write:
BONNER SPECIALTIES
2900 Tilden Avenue
Los Angeles 64, Calif.

YOU JUST KNOW YOU CAN BUILD and FLY...

TOP FLITE JIGTIMES

- ALL PARTS DIE-CUT!
- READY TO ASSEMBLE!
- NO TOOLS NEEDED!
- GUARANTEED TO FLY!

25c JIGTIME JETS

"Catapult" these Jets with powerful rubber band supplied with kit.

59c JIGTIMES

2 color, propeller-driven, beautiful flyers. Most have 18" wingspans.

$1.50 JIGTIME "LIL RASCAL"

FREE-FLIGHT and/or CONTROL LINE

FOR ½A ENGINES

The ideal "first" gas-powered kit. Famous JIGTIME design makes it easy to build—a "honey" to fly.

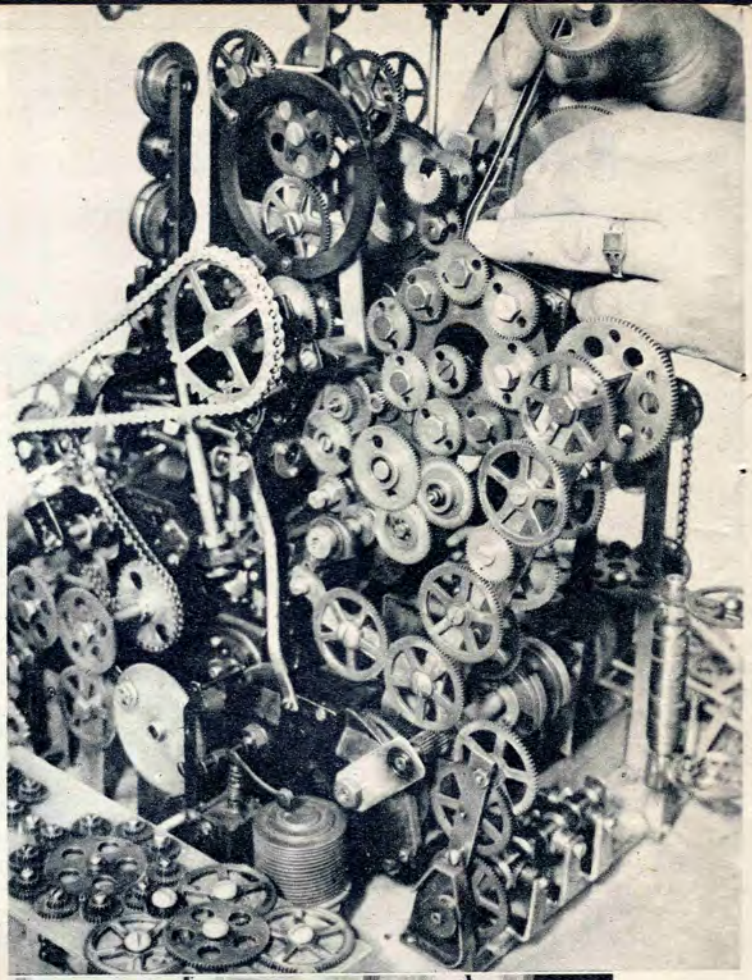
SEE THEM AT YOUR HOBBY DEALER

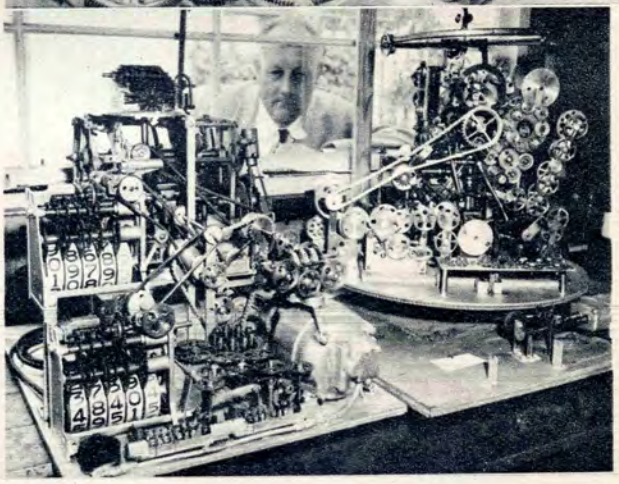
If no dealer near you, send order to TOP FLITE. Add 20c per plane for postage and packing.

TOP FLITE MODELS INC.
2635 S. Wabash Ave., Chicago 16, Ill.

MECHanics TECHnology SCIence | PHOTO Revue

WORLD A-WING (top to bottom): First USAF turboprop military transport, 174 ft. span *Douglas YC-124B Globemaster;* 4 Pratt & Whitney YT-34-P-1 engines develop 5500 hp each. Carries 200. *Convair F-102* delta wing all-weather supersonic interceptor; Pratt & Whitney J-57 jet engine with afterburner develops about 15,000 lbs. thrust. *Sikorsky XHR2S* (S-56 in civvies) is most powerful helicopter; gets 4000 hp from its two P&W R-2800 engines. For U. S. Marines, Lockheed's private venture in jet trainers, *L-245*, is based on T-33. Large British cargo transport Blackburn & General Aircraft *Beverley* carries 132 passengers.





Highly complex mechanism designed and built by Lawrence A. Wahlstrom, Los Angeles. Has 1000 different gears, yet does absolutely nothing useful! Fantastic "gadget" below at least can count.

"Semisphere" building designed, constructed by Le Tourneau Inc., Longview, Tex. 85 ft high, 300 ft. diameter; no supporting structure inside. Quickly erected by semi-skilled labor.

the challenge of

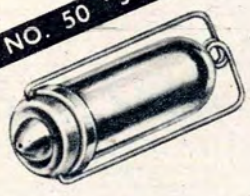
JET POWERED FLIGHT

Clean design, careful construction and skilled workmanship . . . these are the pride of the accomplished modeller. And it is these characteristics that pay such enjoyable dividends to users of Jetex engines. For the basic fact of jet power is this: *Efficiency is proportional to speed.* Thus minimum air resistance and weight of a model take the greatest advantage of the 800 m.p.h. thrust of a Jetex engine.

That is the challenge . . . to build models which combine strength, streamlining and low weight . . . to achieve maximum performance. Meet the challenge and you will be rewarded by thrilling performance and the enjoyment which only jet powered flight can offer.

JETEX JET ENGINES

JETEX NO. 50 "STANDARD"



The world's smallest jet engine, most popular in the line; it is adaptable to practically any small model on the market. Price, complete with fuel, wick, instructions. $1.95

JETEX NO. 50B "Contest Special"—a sturdier version of the No. 50 "Standard", designed specifically for use with an augmenter tube. Price, with fuel, wick, instructions, and 6-INCH AUGMENTER TUBE $2.95

JETEX No. 50 fuel—6 pellets with wick and spare washers ..... $ .50
15 pellets with wick and spare washers $1.00

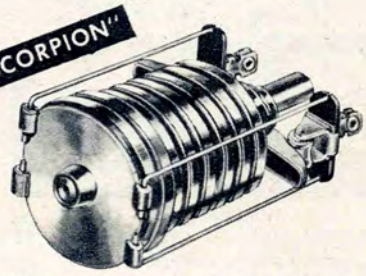
JETEX NO. 150 "JETMASTER"

Its streamlined proportions make this the ideal engine for average-size scale models of jet fighter planes. The 12-inch augmenter tube, available separately, may be used as a structural member of such models.

Price, complete with fuel, wick, instructions $4.95
12-inch augmenter tube for "Jetmaster" (may also be used with the No. 600 "Scorpion") ..... $ .95
JETEX No. 150 "Red Spot" fuel—10 pellets with wick and spare washers ..... $ .95

JETEX JET ENGINES				
SPECIFICATIONS	#50	#50B	#150	#600
ENGINE WEIGHT	.2oz.	.2oz.	.73oz.	1.6oz.
FUEL WEIGHT	.2oz.	.2oz.	.27oz.	.4oz.
TOTAL WEIGHT	.4oz.	.4oz.	1.00oz.	2.0oz.
THRUST (average)	.6oz.	.6oz.	1.75oz.	5.5oz.
THRUST with Aug. Tube	-----	.75oz.	2.25oz.	7.0oz.
THRUST duration	12 sec.	12 sec.	14 sec.	10 sec.
JET EXHAUST VELOCITY	1200 ft/s	1300 ft/s	1400 ft/s	1600 ft/s
OVERALL LENGTH	1 5/8"	1 7/8"	3 1/2"	2 1/4"
MAXIMUM DIAMETER	1 1/16"	1 1/16"	1"	1 1/4"
MODEL SIZE LIMIT (span)	16"	20"	36"	48"
MODEL WEIGHT LIMIT	1.5oz.	1.7oz.	5.0oz.	16.0oz.

JETEX 600 "SCORPION"



The newest, largest, and most efficient of the JETEX family; thrust is THREE TIMES the total weight! A superlative engine for spectacular speed and performance.

Price, with fuel, wick, instructions, AND 6-INCH AUGMENTER TUBE $8.95
JETEX NO. 600 "Red Spot" fuel—10 pellets with wick and spare washers $1.95

AMERICAN TELASCO LTD., Huntington, N.Y.

AERONAUTICAL ENGINEERING DESIGN

HIGH PAYING POSITIONS AND EXCEPTIONAL OPPORTUNITIES AWAIT TRAINED AERONAUTICAL ENGINEERING DESIGNERS

The Aircraft Industry needs TRAINED MEN and needs them badly. Establish yourself NOW with CAL-AERO TECHNICAL INSTITUTE TRAINING—and step right into one of these good Aviation Jobs WITHOUT BREAK-IN—AND AT TOP PAY...WE CANNOT SUPPLY THE DEMAND FOR CAL-AERO GRADUATES—

AERONAUTICAL ENGINEERING DESIGN
MASTER AVIATION MECHANICS
(Aircraft & Engine Mechanics)
SPECIAL POWER PLANT MECHANICS
(Aircraft Engine Mechanics)
JET ENGINE MECHANICS
MAXIMUM TRAINING IN MINIMUM TIME

Since 1929—10,000 successful civilian graduates—26,000 pilots and 8500 technicians trained for U.S. Military Forces.

Cal-Aero Technical Institute is a subsidiary of Grand Central Aircraft Co., world's largest maintenance and overhaul facility—and carries topmost recommendations and approvals from military, government, educational and foremost aircraft industry sources.

APPROVED FOR VETERANS
MAIL COUPON TODAY

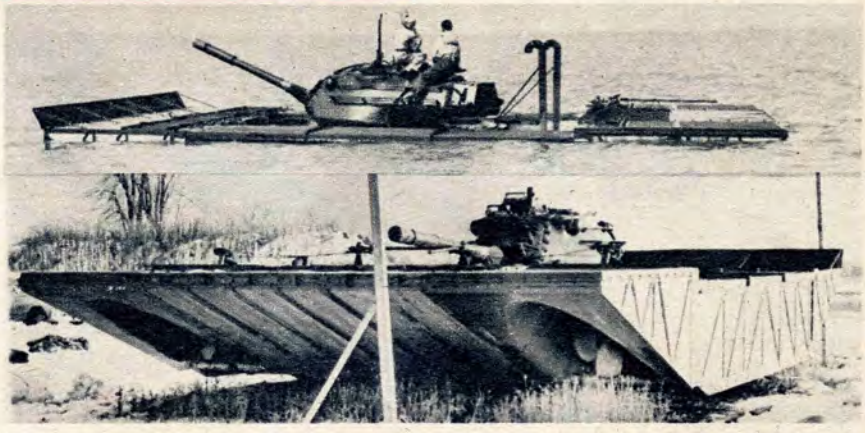
CAL-AERO TECHNICAL INSTITUTE
GRAND CENTRAL AIR TERMINAL
GLENDALE 1, CALIFORNIA

Please send catalog & full information FREE
☐ AERONAUTICAL ENGINEERING DESIGN
☐ MASTER AVIATION MECHANICS *(Aircraft & Engine Mechanics)*
☐ SPECIAL POWER PLANT MECHANICS *(Aircraft Engine Mechanics)*
☐ JET ENGINE MECHANICS
HOME STUDY COURSES
☐ Aeronautical Drafting
☐ Aircraft Blueprint Reading
☐ Stress Analysis and Design

name _____ age _____
address _____
city _____ zone _____ state _____
High School Graduate—Yes ☐ No ☐
ATH-5 Veteran ☐ Non-veteran ☐

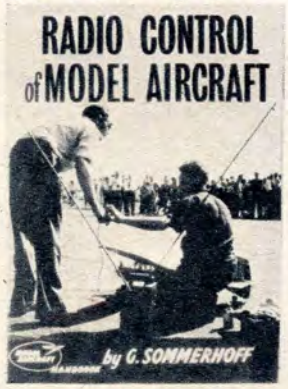
MECH • TECH • SCI • PHOTO REVUE

Self-propelled plastic float takes 48-ton tank over water; turret exposed, ready to fire. Uses twin-exhaust pipes.



McDonnell XV-1, first military convertiplane. Developed jointly by Air Force and McDonnell Aircraft. Rotor for take-off, wings and pusher prop for fast level flight. Craft is "unloaded-rotor" type. Pulse jet engines power blades.

NEW RADIO BOOK RELEASE!!



"RADIO CONTROL OF MODEL AIRCRAFT"
BY G. SOMMERHOFF

First of 3 new Radio Book series. Contains over 160 pages (about 50% more pages than past Radio titles that we have sold). Approx. 85,000 words in text, over 160 drawings & photos. Gives elementary course for beginners. For the expert with years of experience, book deals with complex work. (Many of the multi control units are PATENTED, however permission is given to use these units for personal use.) Units never before shown in magazines or other books. PLANS and SCHEMATICS (not just theory) are given for perfected units—3 different TRANSMITTERS, 4 RECEIVERS (hard tube & gas tube) including tone control. Layouts for 7 ESCAPEMENTS simple type may be constructed in one evening to complex type giving ENGINE, RUDDER & AILERON operation from one receiver without sequence. An escapement made from information could well be worth more than the PRICE OF THE BOOK. Make your own sensitive, ultra light weight Relay's from drawings, your own Field Strength Meter, Multi range test meter all are shown. Charts telling how to figure Quench coil values, how to figure slug tuned form windings, Wire resistance tables, etc. For those owning Commercially made Radio units, or those working from kits a full trouble shooting section is given, this information may save you the cost of a tube or Crystal, this alone would be worth price of the book. Boat or Auto's may be controlled also with above units. We cannot tell all of contents in our small ad, why not send NOW, 10 day money back guarantee.

OVER 160 PAGES! 85,000 WORDS! CLOTH BOUND!
COMPLETE SCHEMATICS! PATENTED MULTI CONTROLS!
$3.98—MONEY BACK IF NOT SATISFIED

FREE! FREE!
With every book purchase we will send a set of plans for Good Brothers 6 foot famous 1949 "RUDDER BUG".

MAKE $50 PER WEEK IN SPARE TIME
We have a tried and proven plan on how you can make up to $50.00 per week in spare time selling the book "RADIO CONTROL OF MODEL AIRCRAFT" Only a small amount of time necessary. Large cash outlay not necessary to get started. Complete sales plan $1.00 ($1.00 is refunded to you if you use the plan)

SALES PLAN - - $1.00

WORLD FAMOUS MODEL PLANS
All Full Size

B.G.-44 1952 world record A/2 glider 66 in. span - - - $1.50
LEPRECHAUN - 8 1/2 ft. tow glider for Radio - - - - $2.75
BLERIOT MONOPLANE - free flight 1/2 A or rubber - $1.75
D H TIGER MOTH - - $1.25

NEW AEROMODELLER ANNUAL 1953-54

NOW AVAILABLE, the 6th of the series, new 1953-54 "AEROMODELLER ANNUAL" over 160 pages, 200 plans & photos, CLOTH BOUND. Full coverage of INTERNATIONAL RADIO CONTROL MEET of Belgium, WAKEFIELD and GAS POWER meets of England & A/2 GLIDER meet of Yugoslavia & INTERNATIONAL CONTROL LINE meet of Milan, Italy. Fully dimentioned drawings are given of all winning models. New fuel formulas for Diesel & Glow plug engines. 20 NEWLY DEVELOPED Airfoil sections New free flight FLYING DISCS from Holland, ½ A Free flight scale models. Japanese contest winning models. New Delta Wing design graphs.

10 DAY MONEY BACK GUARANTEE

PRICE - $2.98

FULL SIZE PLANS GOOD BROS. "RUBBER BUG".....$2.75

OTHER FAMOUS BOOKS

Model Boat Construction - -	$11.95
Speed Control Line Models - -	2.98
Stunt Control Line Models - -	2.98
The Model Boat Book - - -	2.98
LATEST 74 page plans catalogue showing over 400 plans -	25c

PIRELLI RUBBER DUNLOP

270 ft. per hank		270 ft. per hank	
¼" - -	$6.50	¼" - -	$2.38
Trail 40 ft. hank -	$1.00	3/16" -	3.78
		¼" - -	4.98

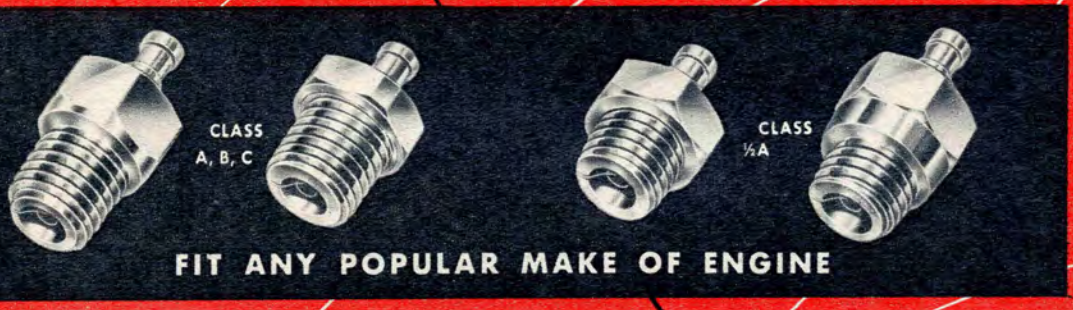
Print name & address in column this ad, check items you wish & add 10c per book for postage. Remit with order. Send 25c for plan & book catalogue. Year subscription "AEROMODELLER" $4.50 sample FREE with cat.

GULL MODEL AIRPLANE CO. 10 EAST OVERLEA AVE. DEPT. A BALTIMORE 6, MARYLAND

A NEW APPROACH

Each plug packed in handsome metal protective "show case"

Cheminol's NEW APPROACH to the Glow Plug Problem is STRAIGHT TO THE POINT!



FIT ANY POPULAR MAKE OF ENGINE

Kwik-Start Plugs use less current! Furnished only in polished nickel... and NO INCREASE IN PRICE.

65c. ea.

When your glow plug fails to glow—don't blame the filament! 9 times out of 10, the fault is due to ordinary insulating materials which break down and cause shorting.

Cheminol Engineers went straight to the heart of this problem! The insulating material in the new O&R Kwik-Start Glow Plugs is ABSOLUTELY INDESTRUCTIBLE under ordinary use. POSITIVELY WILL NOT BURN OUT, SHORT, COME LOOSE OR LEAK! This means an end to plug failure due to faulty insulation.

The NEW O&R Kwik-Start Glow Plugs also contain a more rugged iridium-platinum filament which is corrosion-proof and DELIVERS 500 to 1000 MORE RPMs. You get MORE POWER, LONGER LIFE and QUICKER STARTING.

Take *the new approach* to glow plug satisfaction! Treat your engine to the right O&R KWIK-START PLUG. More than 6,000,000 O&R glow plugs have been made and sold.

That's experience you can count on!

P.S. For an unbeatable combination, use the corresponding O&R Fuel. At hobby dealers everywhere.

Cheminol Corporation
9307 EAST BERMUDEZ ST., RIVERA, CALIFORNIA

Eastern Factory and Warehouse:
410 North Cass Street, Middletown, Delaware

In Canada: Canadian Hobbycraft, Toronto

GET OFF TO A BIGGER TROPHY SEASON WITH A KWIK-START

"I Need Only One Dope and One Cement"

When I Build a Monogram Model I Get a Perfect Job Every Time on the Acetate Plastic Parts, Balsa Wood and All Other Materials in Monogram Kits!

Whether I'm working with balsa, tissue, cloth, metal or fine acetate plastic parts Mono-Glue and Mono-Dope is all I need. I don't have to bother with special plastic cement nor with slow-drying enamels when it comes to painting. The exact colors I need are shown on all Monogram plans. You'll like these fine products too for other model building jobs. Be sure to ask for Mono-Glue and Mono-Dope wherever model building kits are sold.

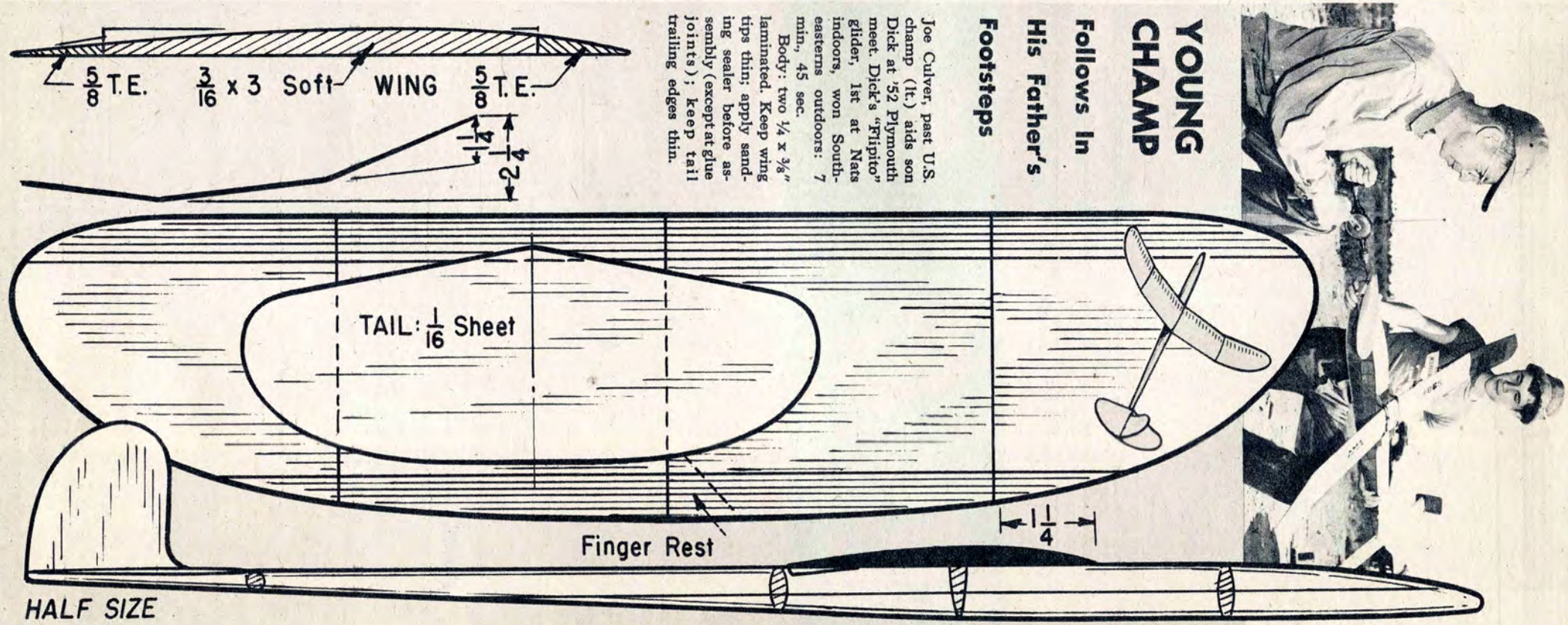
Mono-Glue—Dries Fast—Really Holds
Large Tube • 15¢
Mono-Dope—19 Colors and Finishes—15¢

MONO ★ GLUE AND MONO ★ DOPE ... *By the Makers of Famous Monogram Models*

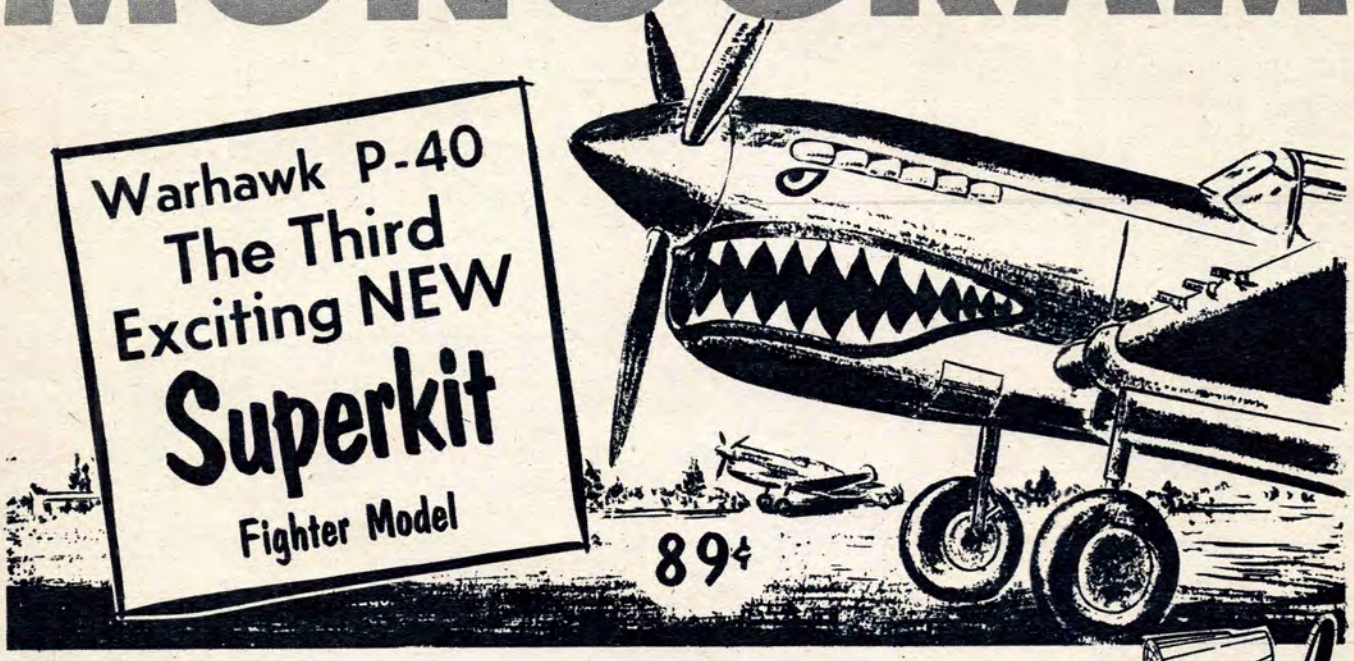
YOUNG CHAMP Follows In His Father's Footsteps

Joe Culver, past U.S. champ (lt.) aids son Dick at '52 Plymouth meet. Dick's "Flipito" glider, 1st at Nats indoors, won Southeasterns outdoors: 7 min., 45 sec.

Body: two ¼ x ⅜" laminated. Keep wing tips thin; apply sanding sealer before assembly (except at glue joints); keep tail trailing edges thin.



MONOGRAM



Super Detailed Plastic and Balsa Assembly With Monogram's Famous All-Finished Parts

Here is number three, fellows — in the new 1954 Superkit series. It's the famous Warhawk P-40, with the ferocious tiger shark mouth — a grand new model for your Superkit collection and a fitting companion to the new MiG and Sabre Jet.

Like all other Monogram Superkit models, all parts are finished. Fuselage, wings and tail are finest balsa — completely shaped and finished. 21 acetate plastic parts give you the last word in detail and realism — three-bladed prop, display stand, pilot, cowl, canopy, wheels, landing gear struts, exhausts, gun assemblies, headrest, knees, fairing, tail wheel, etc. Authentic tiger shark decals and markings included. Start a Superkit collection today.

Some of the 21 Molded Acetate Plastic Parts, Finished Fuselage, wings, tails, Decals, in Warhawk Kit.

Three More Sensational New Monogram Models

The Newest 1954 Kits

NEW ALL PLASTIC Midget Racer

Be sure to see Monogram's new all-acetate plastic midget racer. It's a beautiful model, with driver, dummy engine, removable hood. Easiest to assemble. Only 98 cents.

Superkit Sabre Jet F-86

Introduced in February. 6 finished balsa and 18 acetate plastic parts. An authentic model. Only 89 cents.

Superkit Russian MiG-15

Introduced in January. Only 89 cents.

Model and Hobby stores everywhere have Monogram Models. If no store near you, order from address below. Add 25 cents for postage and packing.

Monogram Models, Inc. 3421 WEST 48TH PLACE, CHICAGO 32 { MODEL AIRPLANES • SHIPS JET POWER RACERS

E-Z-JUST Plastic
CONTROL HANDLES

NOW with PRE-FORMED loops!

FINGER TIP ADJUSTMENT—NO SCREWS, NUTS, BOLTS OR TOOLS NEEDED

Quick hook-up and unhook! The cable loops are already formed for you! Adjusts and locks quicker than any other handle, — can't slip. 150-lb. min. test. Hot fuel-resistant. "Standard" 5-inch size for all flying. "Hot Rock" 4-inch size for speed flying.

only 85¢

Look for them in the red-white-and-blue boxes!

TEST STANDS

Hardwood with adjustable clamps and pins for quick, tight lock up of any size engine. $1.75

"MINIMOUNT" for engines up to .19 displacement. $1.25

E-Z-JUST AT ALL LEADING DEALERS

PHIL-LEYS CHEEKTOWAGA 25 NEW YORK

The Readers Write

The editors welcome opinions, observations and comments from the readers. Please address your letters to: Air Trails HOBBIES For Young Men, 304 E. 45th St., New York 17, N. Y.

Info on '54 Nationals . . . I am writing this letter in a rather desperate attempt to get some information about the '54 Nationals. First of all, have they set a date? I am delaying my enlistment in the Air Force in order to attend (which irritates my parents no end) so I hope they have it earlier than last year. Is it going to be held at Olathe, Kansas, or Glenview, Illinois? Will the Navy provide bed and meals (at cost) as in the past and where do I write to obtain these accommodations?

Bill Dahlgren, Chicago, Ill.

● The modelplane "Nats" are scheduled for Chicago's Glenview Naval Air Station during the last week in July. For complete details write Academy of Model Aeronautics, 1025 Conn. Ave., N.W., Wash. 6, D. C.

R/C Expansion . . . I realize that your magazine is devoted to aeromodeling, real airplanes, R/C, C/L, etc., but since there is no model magazine as good as yours, in my opinion, I think you should have more models in R/C like Howard McEntee's TV truck and Red Kochman's Porsche car, which appeared some issues ago. I feel this way because I recently built an R/C plane that met a ghastly fate due to battery failure. Now I'm playing with R/C on the ground and water. Although R/C cars and boats aren't as exciting, they aren't as likely to be lost as airplanes.

George Hall, Gary, Ind.

● How do you like "Whatizzit" in this issue, George?

The Senor's Private Copy . . . Only last night I was reading in the current issue about the Model Annual for 1954, and upon reaching the office this morning I found your complimentary copy on my desk!

No doubt you will receive several orders for this Annual, for I gave the "word" already to all my modeling friends, also warning them that my copy was "off limits," for I do not want a repeat performance of last year's browsing, borrowing, and asking for it time and time again. Not that I'm selfish, but to each his own. I have only given this issue a quick glance, but, as usual for Air Trails Annual it has more digested information than a pocket dictionary.

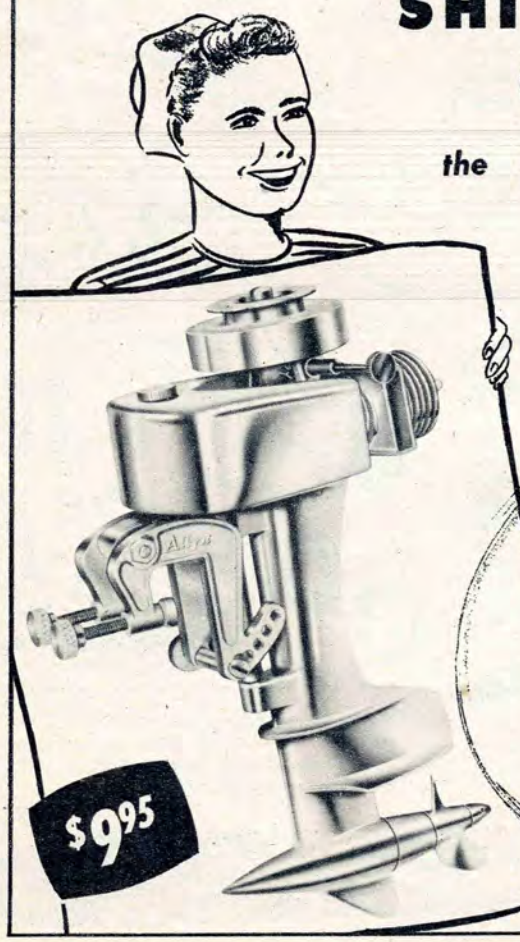
Antonio V. Alvarado, Havana, Cuba

Word from Betty . . . In 1951 you were extremely cooperative in using a story written by me for your publication and I now find that it is most desirable to have two or three copies of this edition. The story was entitled "Girl vs. Airplane" and was written about my aerobatic airplane, "The Little Stinker." Your cooperation will be appreciated.

Betty Skelton, Manager, Aeronautical Electronics, Inc., Raleigh-Durham Airport, Raleigh, N. C.

● Betty Skelton, top-notch aerobatic pilot, won the International Feminine Aerobatic Championship at the Miami Air Maneuvers for three consecutive years, 1948, '49, '50. Her Pitts Special known as "Little Stinker" was a diminutive red and white biplane.

SHIP AHOY! with Allyn's GAS POWERED OUTBOARD



the SEA FURY .049

You'll be thrilled with the SEA FURY .049, the first internal combustion outboard engine for model boats.

Boat builders have long awaited this outboard engine designed to operate on glow-fuel! It clamps onto your boat just like a big outboard and looks just like one, too. The SEA FURY is powered by the only .049 engine especially engineered for an outboard power-head — to give you hours and hours of trouble free pleasure. One trial will prove to you beyond a doubt that for tops in speed, smooth performance, cool running, and dependability there is nothing that equals the SEA FURY. ¶ Yes, Allyn, so well known for its fine quality products, again leads the field. *Clamp on a SEA FURY, and have fun!*

$9.95

Allyn SALES COMPANY, INC.
6425 McKinley Ave. • Los Angeles 1, Calif.

Come on, Hal—tell the "Big Boys" how you do it!

Hal Roth of Richmond, Calif.

Hal won a record-smashing first place in the model Clipper* Cargo PAA Load Event at the '53 NATS. His 6-oz. model carried 23¼ ounces of payload—a ratio of weight empty to payload which never has been approached by the "Big Boys" in full-scale aviation!

PAA LOAD EVENTS

You're reading about the hottest activity in competitive aviation modeling!

Sponsored first by Pan American in 1948, these weight-carrying events for free-flight gas models have caught on like wildfire. This year they will spark many local and regional meets—and the spotlight will be on PAA Load Events at the NATS.

In designing your entries, remember that the purpose of the event is to encourage the building and flying of model aircraft which resemble full-scale airplanes with respect to *carrying a payload safely through the air.* After all, isn't this the basic purpose of commercial aviation itself?

Start on your PAA Loader now. For rules and specifications for 1954, write to: Educational Director, Pan American World Airways, 28-19 Bridge Plaza North, Long Island City 1, New York. *Trade-mark, Reg. U. S. Pat. Off.

PAN AMERICAN

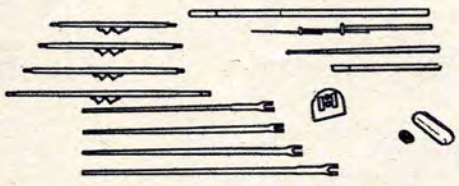
WORLD'S MOST EXPERIENCED AIRLINE

NOW...

EVERYONE A MASTER SHIP MODELER

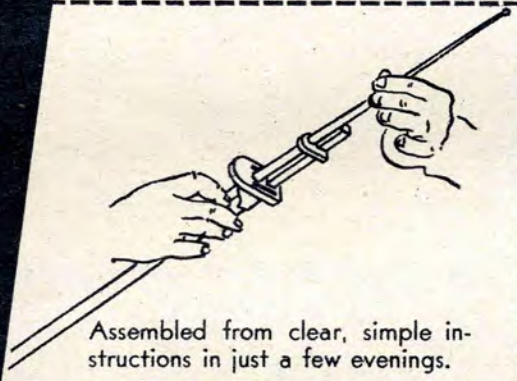
with Master Modelcraft "Commodore" Series

Features 30 precision molded plastic parts . . .



Carved wood hull, ready for sanding—die-cast metal cannons, anchors, lifeboats, etc. . . even material for rigging.

shows details not possible by hand.



Assembled from clear, simple instructions in just a few evenings.

The completed model . . . more worthy of praise than the efforts of the finest model-craftsman!

For the first time, these all-prefab exact scale replicas make everyone a master ship modeler. Whether you choose the sleek Revenue Cutter, the fabulous Baltimore Clipper or any others in this impressive series, you'll get more pleasure assembling the precision-formed wood, metal and plastic parts — each made to show every exact detail. Parts go together so swiftly, so surely; instructions are clear and simple. Of course, no special tools are needed. Apply any regular oil base paint or finish and your completed model will be more worthy of praise than the efforts of the finest model craftsman.

Approx. 18" long - 14" high

C-1 Revenue Cutter
C-2 Brig Washington
C-3 Ten Gun Brig
C-4 Baltimore Clipper

$2.50 each — at your dealer

other MMC products:

Tipsy Primer	$5.95
Skylark	1.40
Small Fry	2.00
Wing Dingus	2.50
Ryan-ST	2.25
Flip-Flap	2.50
Flip-Flap	3.50
British SE-5	3.40
Howard "Ike"	2.50
Wing Ding	3.00
Barracuda	2.25
"Sea Scooter"	2.50
	7.95

Also see our Famous Ships

18 models $1.40 to $1.75 at your dealer

add 25c per kit by mail

MASTER MODELCRAFT ★ NEW YORK 55, N. Y.

MAY 1954 • VOL. 42, No. 2

AIR TRAILS

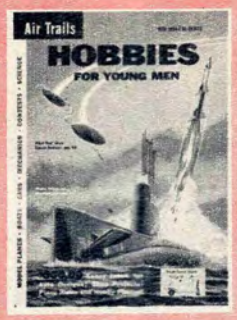
HOBBIES

FOR YOUNG MEN

Albert L. Lewis, Editor
Alex Dawydoff, Technical Editor
Aubrey Kochman, Art Director

Carl Happel, Editorial Production
Rose Borello, Assistant to Editor
Barbara Grey, Editorial Assistant

Editorial Offices Are Located at 304 East 45th Street, New York 17, N. Y.

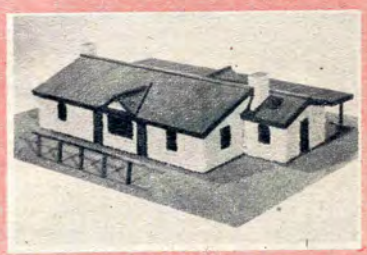


No—if you examine Cal Smith's cover carefully you'll see that no kitchen sink is there! But saucers from space, yes. Guided missile-launching subs, yes. Thinking that wasn't enough, we slipped in the R/C "Whatizzit"

Speaking of Hobbies 4
What's Your Hobby?—Cash Awards for Photos 8
Air Notes 9
Hobby Bookshelf 10
Everything Under Control—Howard G. McEntee 11
Hobby Showcase 12
Mechanics • Technology • Science Photo Revue 16
Young Champ 20
The Readers Write—We Welcome Your Letters 22
Herb Shriner's International Motor Sports Show 26
Bobby Benson's B-Bar-B Ranch Bunkhouse—Cash Prizes! 30
A-Sub Heralds in New Era 32
Cycle Chatter—Conducted by Joe Weber 35
Auto Progress: Memory Lane, 1905-1912—Douglas Rolfe 36
Workbench Drafting-Table Combo 38
High School Grads into Air Force Pilots 40
Chevrolet Corvette Sportscar 42
King Size Fokker Triplane—Frederick Fescharak 44
Hi-Spy California Contest Plane—Hal Roth 46
Air Progress: The Best of the Home-builts—Douglas Rolfe 48
Whatizzit!: Remote Radio Controlled Wonder 52
Kitting Your Way to a Career in Radio 54
Control Master 27X and 27RH Equipment 58
You Ask—We Answer 60
Aircraft Design Competition—Cash Prizes Here Too 62
Blue Ribbon Models 64
Pixilated Platter, Control Line Plane 68
Ships of Old 70
The Long, Loaded Arm of the Law 72
Auto Design Competition—Fun and Prizes 76
Trick Pix—Cash in with Your Camera 78
Hobby-Model World—Reports Straight from the Dope Can 80
Herkimer's .049 Cu. In. Cub 82
My Favorite Model—Aubrey Kochman 86
Hobby Club Emblems 87
There's Money in Magic—Prizes for Your Tricks 88
Hobby Contest Calendar 89
Audio Tone 3-Tube 27 mc. R/C Receiver 90
Veco's Class B 1954 Model Engine 94
Making Money with Hobbies 95
Last Word on Hobbies 96

SOME HIGHLIGHTS:

Hoosier Harmonicist: pg. 26



Win Valuable Awards: pg. 30

Model Ships from Chi: pg. 70

Cop These Persuaders: pg. 72

STREET & SMITH PUBLICATIONS, INC.
Our 99th Year—Established 1855

Gerald H. Smith, President. Ralph R. Whittaker, Jr., Executive Vice President. Arthur P. Lawler, Vice President and Secretary. Thomas H. Kaiser, Treasurer. Robert E. Park, Advertising Director.

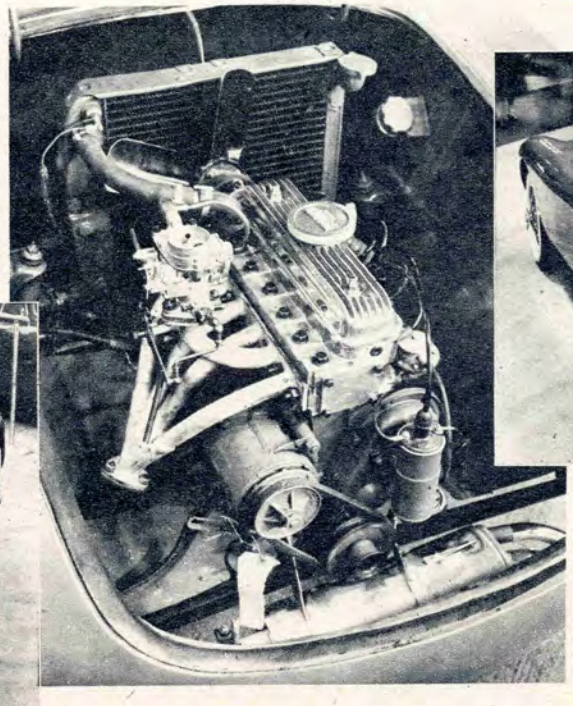
Walter J. McBride, Advertising Manager, 575 Madison Ave., New York 22, N. Y. Frank C. Smith, Mid-Western Advt. Mgr., 230 N. Michigan Ave., Chicago 1, Ill. West Coast Advertising Representative: The Maurice A. Kimball Co., Inc., 2550 Beverly Blvd., Los Angeles 57, and 681 Market St., San Francisco, Calif.

Famous Hoosier Gives You a . . .

HERB'S-Eye View of...

Let's follow comedian Herb Shriner and photog Dan Rubin on tour of glamour cars

Rear installation of compact 4-cylinder motor typical of all Renault cars. This is the small sport roadster. Disp.: about 45 cu. in.; 25 hp at 4500 rpm.



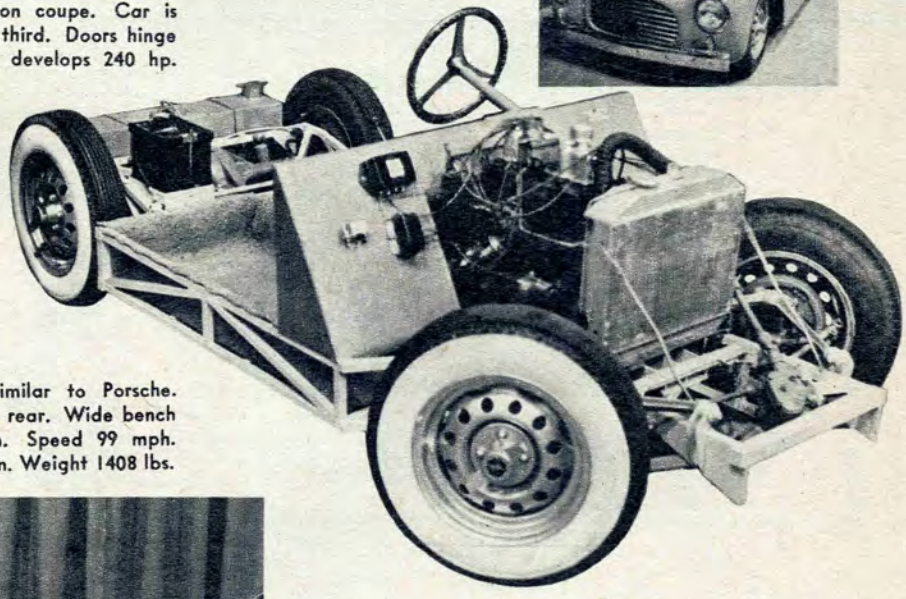
Rear view of Rogue with its louvered rear deck. This particular car holds eight International records for cars with engines from 30 to 45 cu. in. displacement; best speed was 107.1 mph. I.M.S. show drew 150,000 customers. About $2,000,000 worth of cars ordered.

Below: Renault Rogue, plastic body competition roadster from France powered by the 4-cylinder engine, slightly souped. Car wt.: 1000 lbs.

..International Motor Sports Show

Star of the show, Mercedes 300 SL competition coupe. Car is capable of 170 mph in fourth gear, 127 mph in third. Doors hinge at roof, open upwards. Engine is six cylinder, develops 240 hp.

Multiplex 186, an American designed and built sportscar. Chassis shown is tubular truss construction with independent front suspension. Engine is six cylinder "F" head of 124 hp. Multiplex Sport Coupe, upper right, has plastic body. Curb wt., 1705 lbs.



Austrian Wolfgang-Denzel sport roadster is similar to Porsche. Powered by modified 49 hp Volkswagen engine in rear. Wide bench seat holds three. Height with top up 47½ in. Speed 99 mph. Has torsion bar four-wheel independent suspension. Weight 1408 lbs.

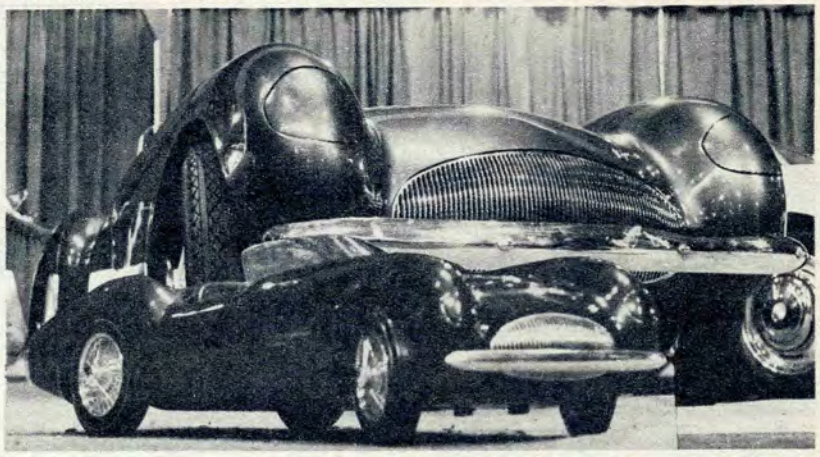
Here's Herb Shriner and his fabulous Phantom Corsair. First built for N.Y. World's Fair, it cost $25,000; recently restyled by Al Goertz. Cord engine and chassis.

Herb's Eye View

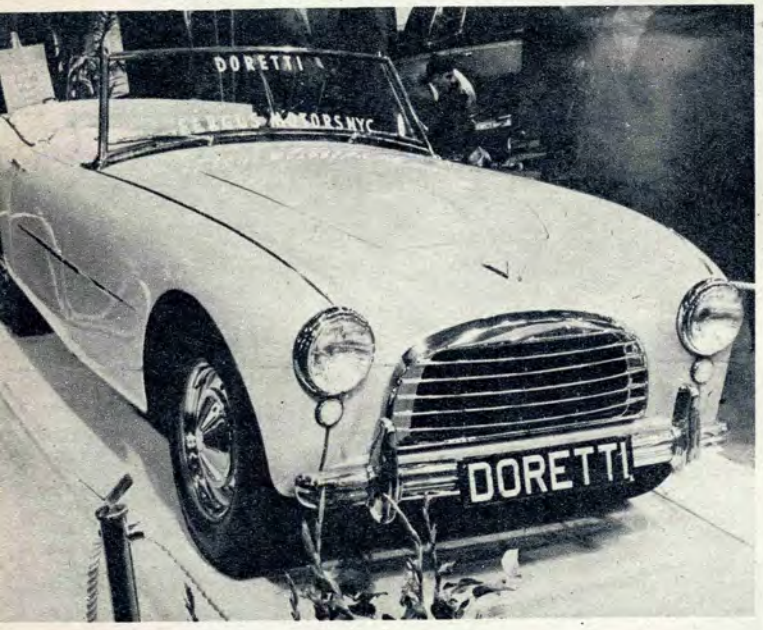
Never saw these in Indiana! Herb Shriner looks over his informative "Motor America."

International Motor Sports Show

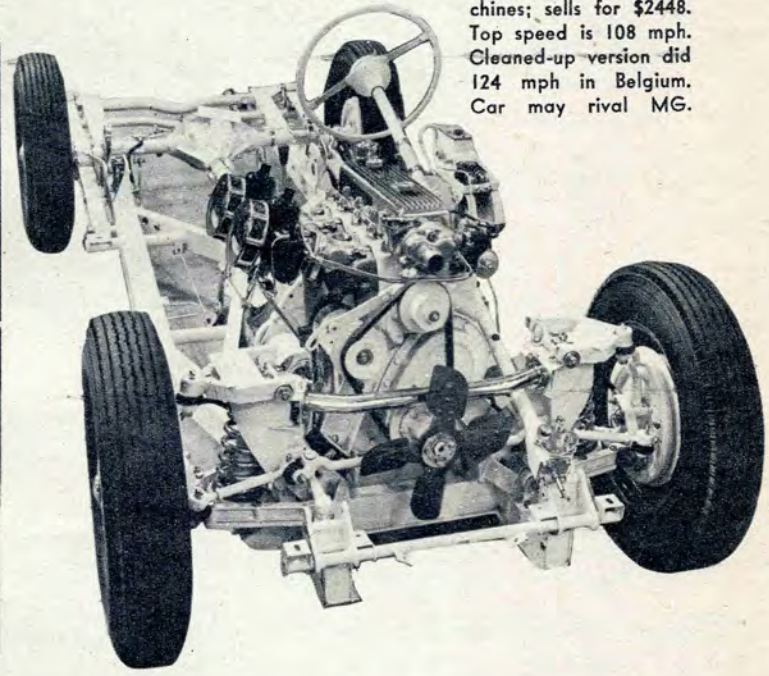
Full-size Vega (rear) and a miniature scale copy. Car designed by Vincent Gardner of Detroit, won Ford "Times" sponsored contest. Engine Ford V-8 60.



British Triumph Doretti sport roadster. Though it sounds of Italian origin, car is named in honor of Dorothy Dean, California foreign car distributor who designed the body. Chassis is tubular, engine 4 cyl. overhead valve of 90 hp. Price $3300.



Chassis of Triumph T.R.2 sportscar powered by same engine as Doretti. One of the most "reasonably" priced high-performance machines; sells for $2448. Top speed is 108 mph. Cleaned-up version did 124 mph in Belgium. Car may rival MG.



Proxy winnah! Herb and famous 3 litre (180 cu. in.) V-6 Italian Lancia in which Juan Manuel Fangio won gruelling Mexican Pan American Road Race, covering 1925 miles in 18 hrs., 11 min. (Lancias took first 3 places in sportscar category.) Brake drums are 4 in. wide.

Italy's famous Fiat automotive firm supplied chassis; the beautifully sleek body was turned out by Italy's Ghia. Engine is a V-8 Fiat of 180 cu. in. displacement with overhead valves, 110 hp at 6000 rpm. Car is capable of 100 mph plus. Weighs 2100 lbs.

Argentina's contribution to automotive design, the Justicialista. Has a plastic body, removable top. Powered by 4 cyl. flat Porsche engine.

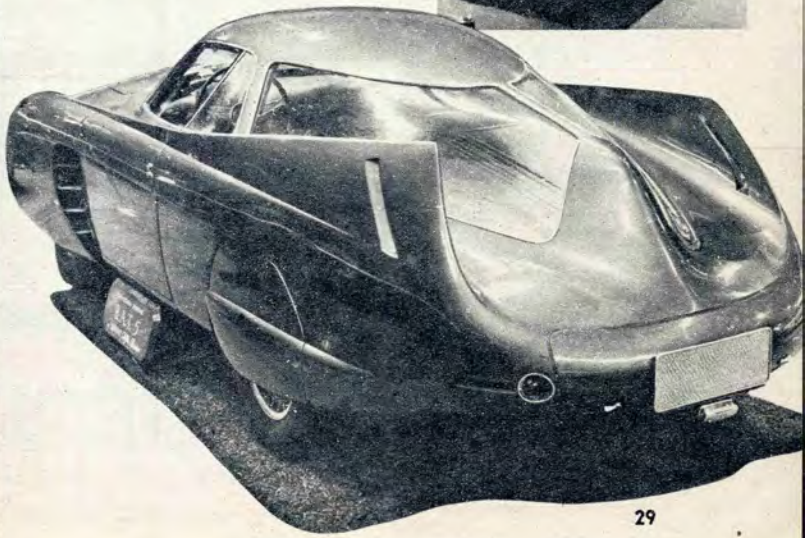
Show's mystery car, Vaughn Super Sport, body by Ghia, V-8 (Fiat?), by Bill Vaughn, Singer's N.Y. distributor.

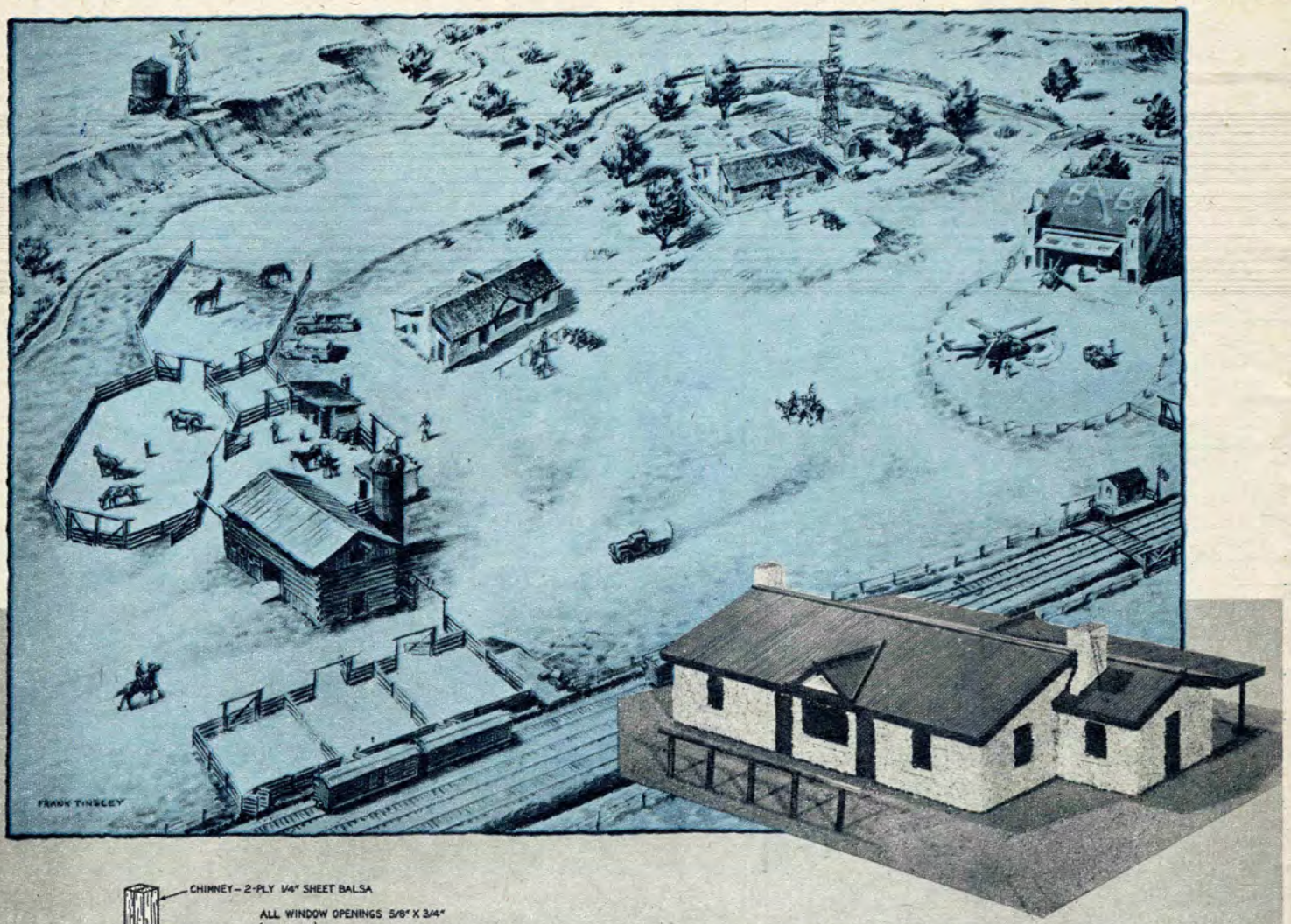
Italian Grand Prix Ferrari was built for our Indianapolis. In '53, 25 million visited auto races (3rd largest crowd in U.S.).

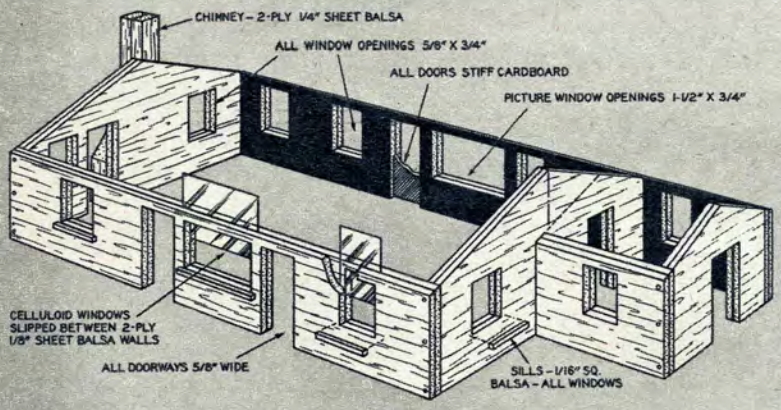
This cute little number is a Fiat Bandini competition roadster powered by 1100 cc. (66 cu. in.) Fiat engine. Note strange headlight location. To meet European sportscar race rules, entry must have lights—anywhere!

The BAT. Italian Alfa-Romeo B.A.T.5, body by Bertone. Large slotted fins give car stability at high speed; aerodynamic front, with retractable headlights.

Herb and young visitors to International Motor Sports Show get together for a technical session on this diminutive Italian copy of a Grand Prix race car. Power is small gas engine. Independent front suspension, 4-wheel brakes, can do 40 mph, costs $1100.



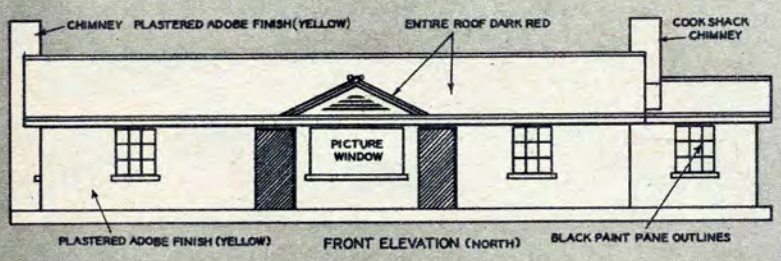


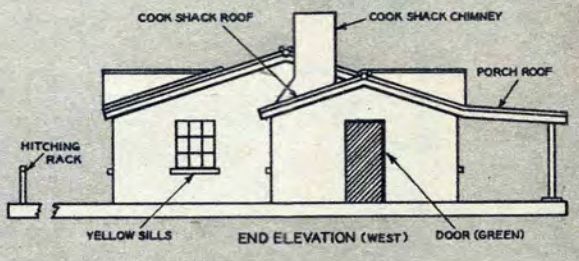

CHIMNEY – 2-PLY 1/4" SHEET BALSA
ALL WINDOW OPENINGS 5/8" X 3/4"
ALL DOORS STIFF CARDBOARD
PICTURE WINDOW OPENINGS 1-1/2" X 3/4"
CELLULOID WINDOWS SLIPPED BETWEEN 2-PLY 1/8" SHEET BALSA WALLS
ALL DOORWAYS 5/8" WIDE
SILLS – 1/16" SQ. BALSA – ALL WINDOWS

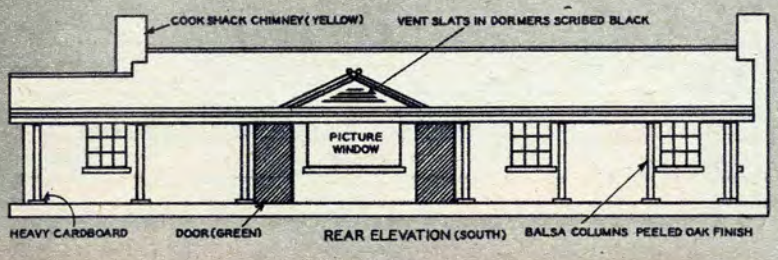
PRIZES GALORE! BUILD

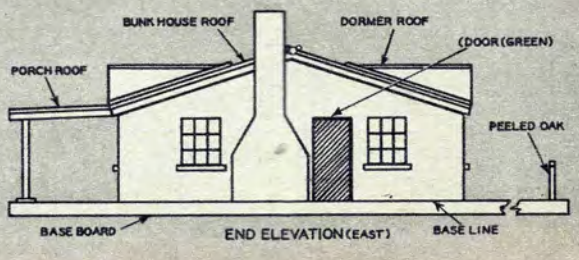
Bobby Benson's

B-BAR-B
Ranch Bunkhouse









HERE ARE THE AWARDS!

First prize.....$100.00

Second prize..... $50.00

Next 4 places: Famous-make AM band Eveready Battery-powered personal radio . . . these are the batteries with "Nine Lives."

Next 40 places: two-tone fountain pen-type personal flashlight by Eveready complete with those long lasting Nine-Lives batteries.

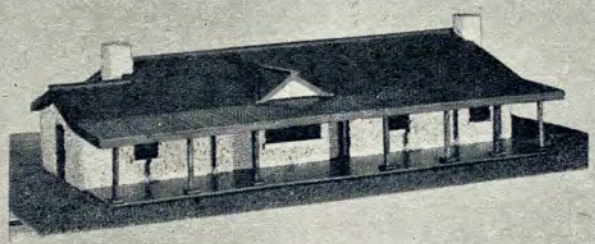
EVEREADY POWERED RADIO
Neat 2 x 6 x 7¾ inches; pulls in all local stations 500 to 1600 KC.

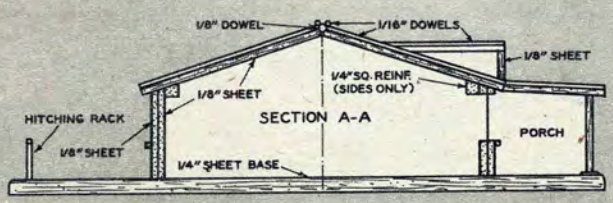
EVEREADY FLASHLIGHT
Handy 5 inch length, 9/16 inch. dia.

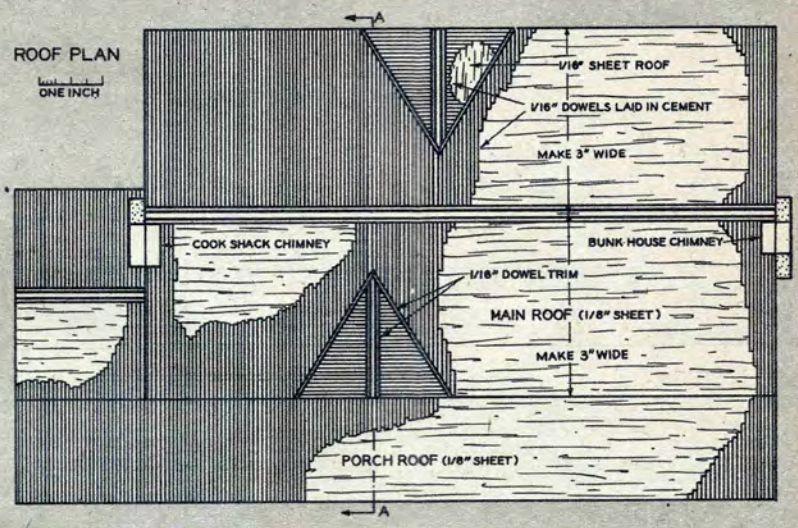
Bobby Benson and his B-Bar-B Riders program broadcast coast-to-coast on the Mutual Broadcasting System three times each week. Consult your local listings for time and station. Follow the adventures of Bobby, foreman Tex and the fabulous Windy Wales; B-Bar-B ranch hands are busy hobby-model fans in their spare time.

BIG PRIZE PHOTO-MODEL CONTEST!
It's a Cinch for any Modelmaker!

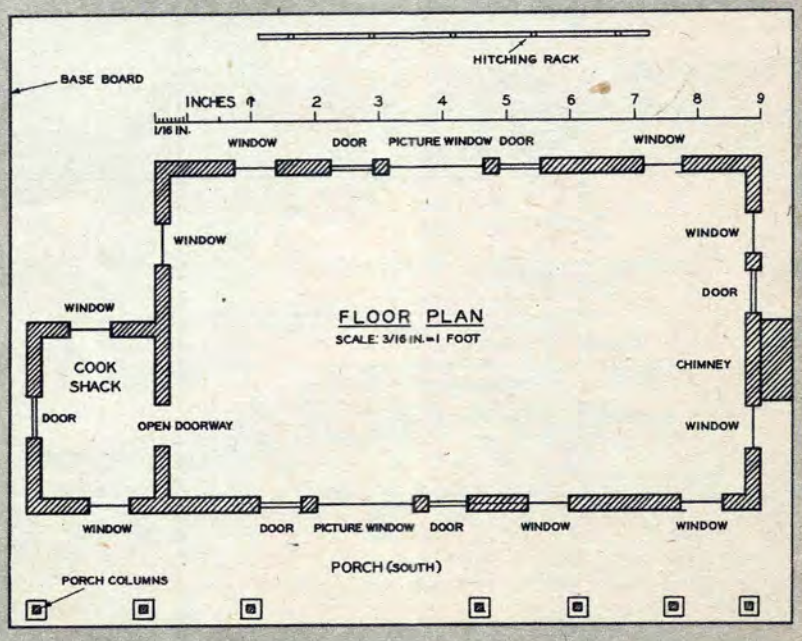
■ Not only will this model bunkhouse building project be of special interest to all the listeners of the famous B-Bar-B Riders program which is aired nationally three times a week over Mutual network stations, but it should appeal to all plane-boat-railroad model fans since it is such an easy affair to turn out. But note this: the best model will suffer if it's poorly photographed! We'll judge your model on the basis of the photo you submit. DON'T SEND YOUR COMPLETED BUNKHOUSE MODEL TO US—JUST SEND A PHOTO OF IT! To be considered in the judging your photo entry must be in our hands not later than May 31, 1954. ALSO NOTE THIS: You need not use these exact plans. You can make any type of building which you feel resembles the B-Bar-B Bunkhouse, use any materials, but be sure you take a good photo of it! Don't do your handiwork an injustice by submitting a poor pix. Work from your own plans or these; full-size patterns can be had from Hobby Helpers.





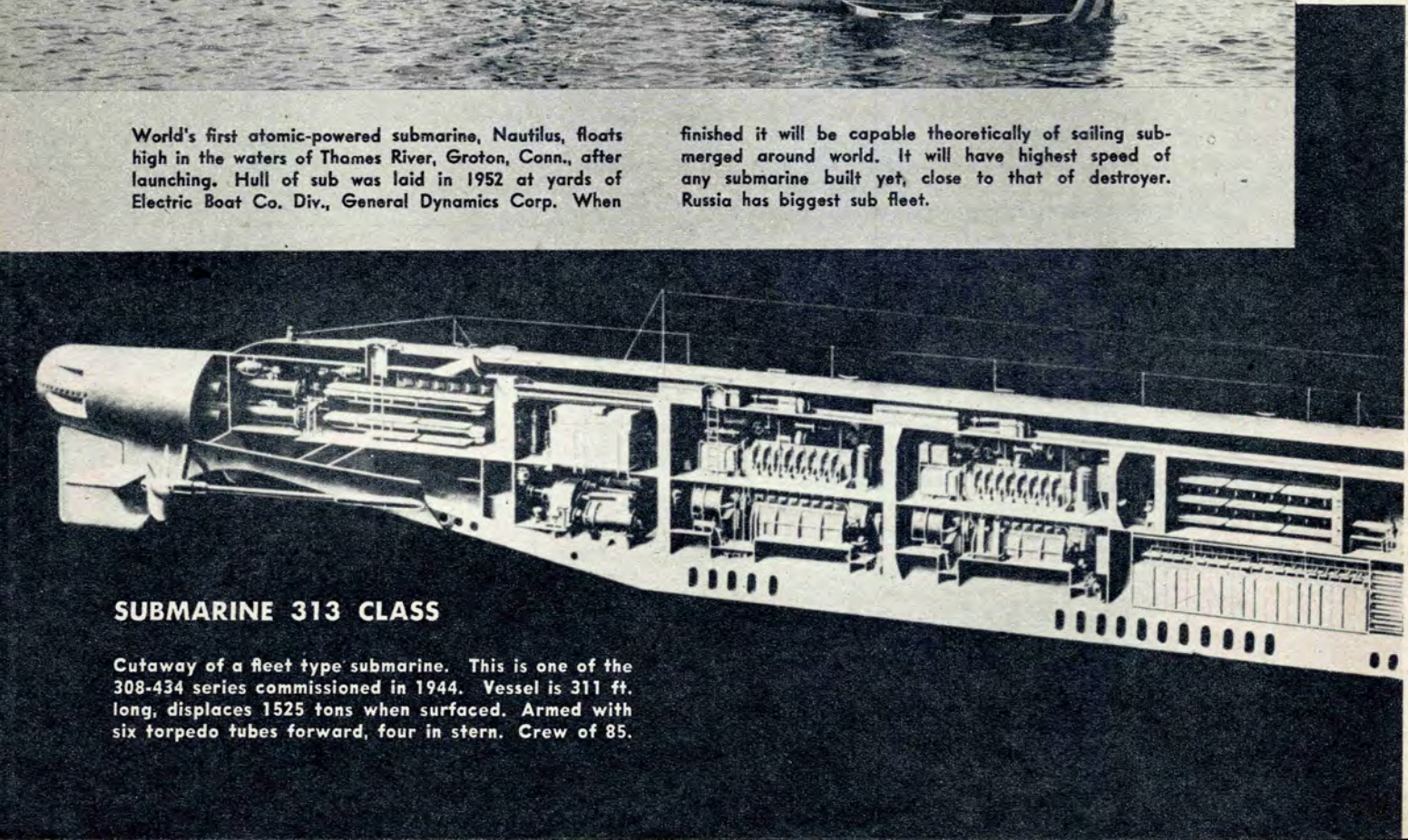


If you wish, you can obtain full-size drawings from Hobby Helpers (Plan# 554B-B, 25c), 770 Hunts Point Ave., New York 59, N. Y.



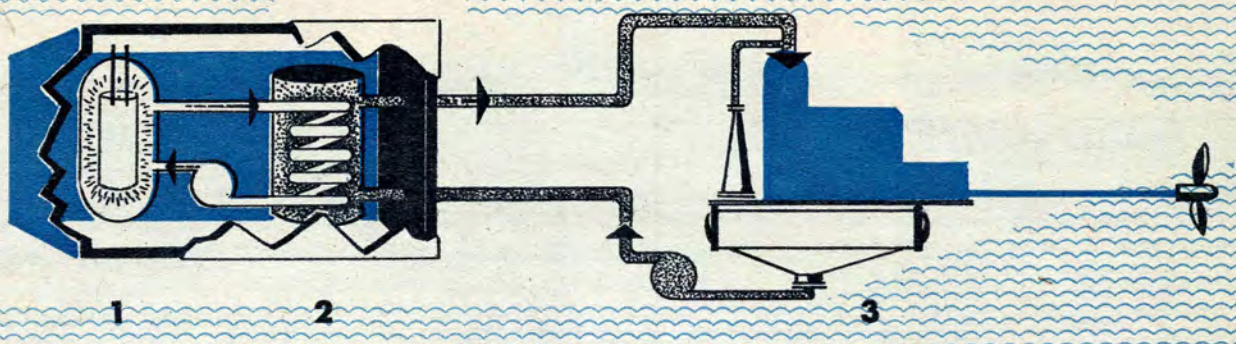
A-Sub Heralds New Era in Underwater Transportation and Warfare

World's first atomic-powered submarine, Nautilus, floats high in the waters of Thames River, Groton, Conn., after launching. Hull of sub was laid in 1952 at yards of Electric Boat Co. Div., General Dynamics Corp. When finished it will be capable theoretically of sailing submerged around world. It will have highest speed of any submarine built yet, close to that of destroyer. Russia has biggest sub fleet.

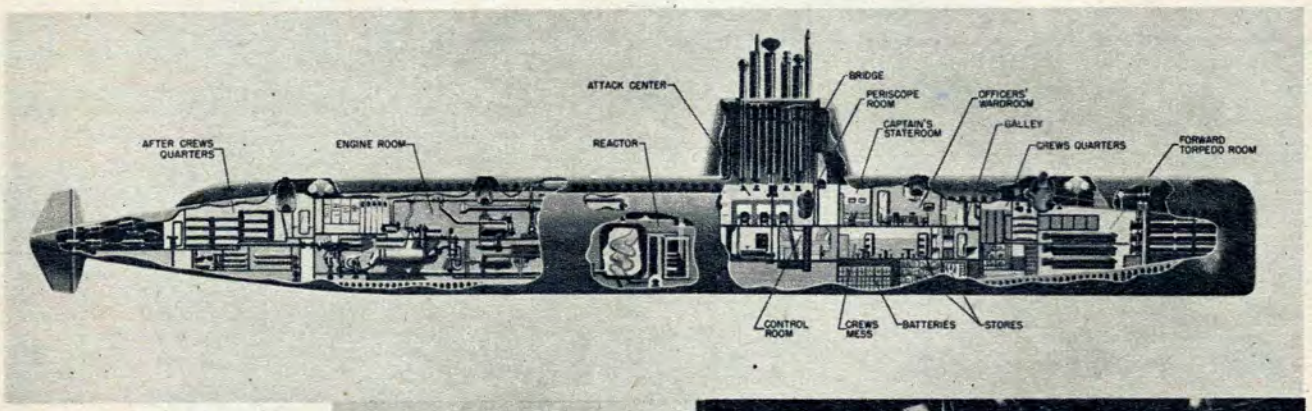


SUBMARINE 313 CLASS

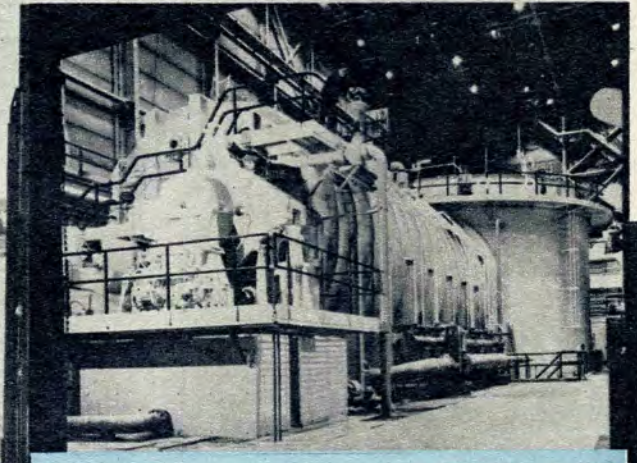
Cutaway of a fleet type submarine. This is one of the 308-434 series commissioned in 1944. Vessel is 311 ft. long, displaces 1525 tons when surfaced. Armed with six torpedo tubes forward, four in stern. Crew of 85.



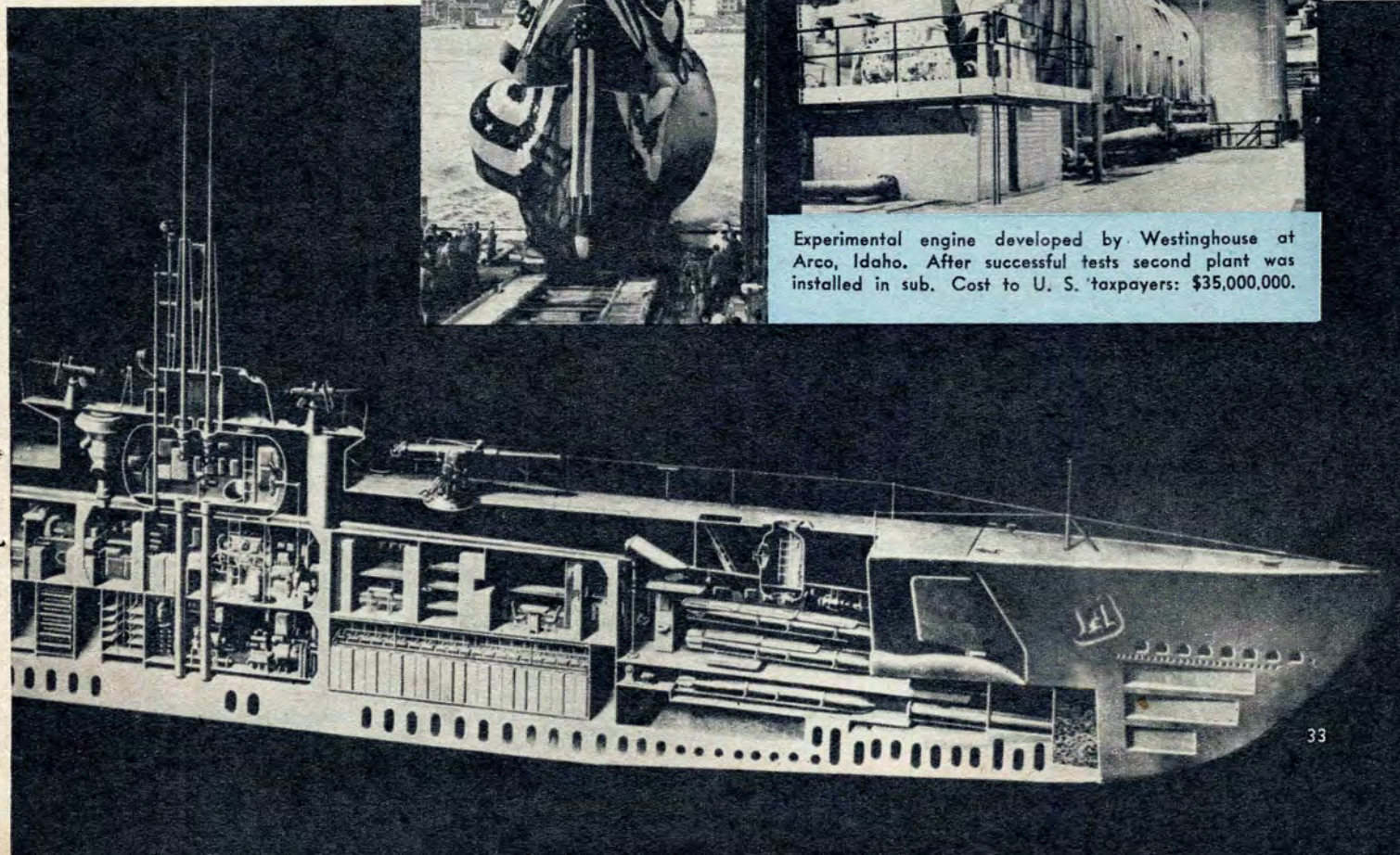
A-sub's powerplant is actually steam engine with Uranium 235 in reactor (1) acting as fuel. Water circulates through reactor, turns to superheated steam through nuclear reaction. Steam is piped to heat exchanger boilers (2) where other water is heated to form steam which is led to turbines (3) driving propellers. Reactor and boiler are shielded. Diagram courtesy "Steelways."



Nautilus cutaway. Biggest problems: development of shielding to protect crews and metals to withstand radiation.



Experimental engine developed by Westinghouse at Arco, Idaho. After successful tests second plant was installed in sub. Cost to U. S. taxpayers: $35,000,000.



ANNOUNCING!

Air Trails HOBBIES
REALISM-IN-MODELS

PHOTO CONTEST

This photo in "Steelways" gave us the idea: a photo contest for sub models in most realistic pose. First prize, $50; 2nd, $25; 3rd, $10. Your photos must be in to us by May 31, 1954. Sub can be kit like Revell, Aurora, Cavacraft or original.

COMING CONTESTS

CONTEST CLOSING June 30, 1954: Same prize set-up. For most realistic pose of model vehicle(s): cars, wagons, carriages, etc.

CONTEST CLOSING July 31, 1954: Same prize set-up. For most realistic scale model planes, powered or non-powered, solid or built-up.

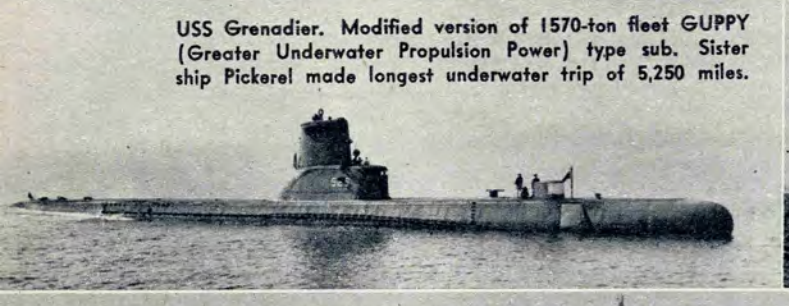
CONTEST CLOSING Aug. 31, 1954: Model subject to be announced.

USS Carbonero SSG type (guided missile launcher) firing Loon. One important role in next war will be shore attack with atom war-head missiles.

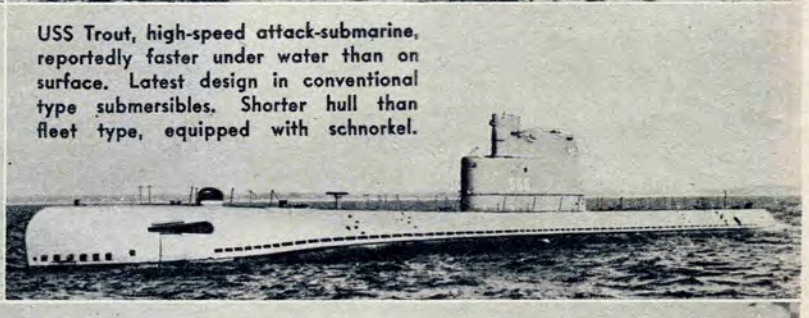
USS T-1, target or "Live Bait" sub used for training in anti-submarine warfare, acts as decoy. Smallest type in service, 131 ft long, crew of 14.

USS Irex, enlarged, improved fleet sub. Displaces 1570 tons surfaced, can dive to 600 ft.

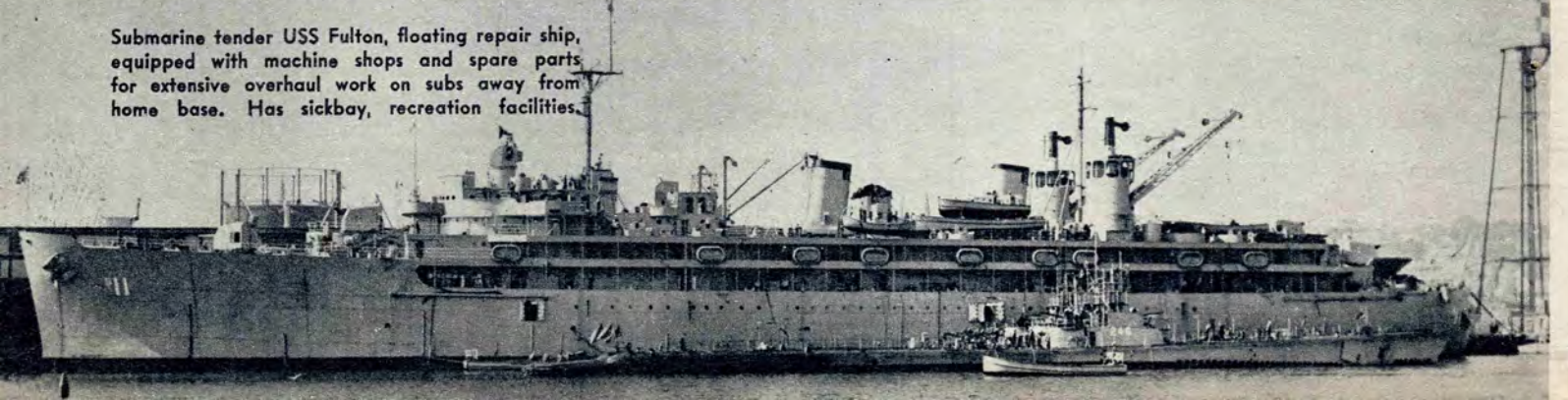
USS K-1, killer type sub. It hunts out and "kills" enemy submarines. Nose bulge contains special listening device; has target-seeking torpedoes.



USS Grenadier. Modified version of 1570-ton fleet GUPPY (Greater Underwater Propulsion Power) type sub. Sister ship Pickerel made longest underwater trip of 5,250 miles.



USS Trout, high-speed attack-submarine, reportedly faster under water than on surface. Latest design in conventional type submersibles. Shorter hull than fleet type, equipped with schnorkel.



Submarine tender USS Fulton, floating repair ship, equipped with machine shops and spare parts for extensive overhaul work on subs away from home base. Has sickbay, recreation facilities.

CYCLE Chatter

Conducted by JOE WEBER with H. A. THOMAS

Get more fun out of your bicycle; follow the lead of America's #1 cyclist!

About the author: Joe Weber's lifelong devotion to cycling began at age eight when he won a bicycle at a church raffle. He rides a bike daily to work, believes most folks overlook the advantages of the bicycle as general utility vehicle for healthful recreation and touring. Today he owns besides numerous standard American makes: a Claude Butler Super Ace tandem with sidecar, two Raleigh standard Sport bikes, a Vindec ladies' bicycle, a prewar Schwinn Superior (lightweight); and is now assembling a custom machine around a Granby of London frame set (Reynolds No. 531 steel), Swiss rims and caliper brakes, derailler-type four-speed gears, flat handlebars and Brooks B-17 leather suspension type seat, with an estimated weight of 18 to 22 lbs. complete and total cost of approximately $125.

■ The bicycle is making a surprising comeback in this country despite almost overwhelming competition from many flashier types of vehicles. Abroad, where they enjoy more utilitarian use, bicycles receive continuing development and today's typical lightweight is a superb mechanism. Consider that a rider may outweigh the bicycle by a ten to one ratio, and it must be admitted that the bike is a very efficient piece of apparatus.

From first-hand experience, we know how conveniently, safely and economically a bike can be used for short commuting. With what can be saved from parking charges alone for an automobile, annually, you can pay for a top quality bicycle, good for a lifetime of service. Some knowledge of traffic rules and riding experience in city traffic will enable you to make surprising time through congested areas—a bike needs only 28 to 30 inches for safe clearance.

Cycling as a sport leaves little to be desired; virtually everybody can get in on it. You'll see and enjoy things on a short bicycle tour that you would never notice from a speeding automobile. There is a need and a place for cycling just as there is a spot for archery, though the bow and arrow is no longer a military weapon.

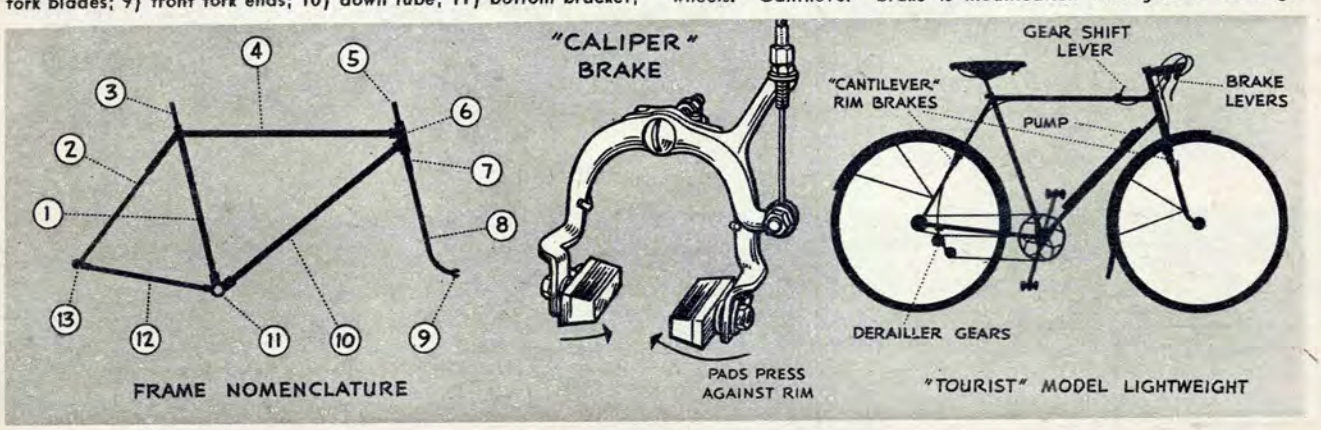
SPECIAL PRIZE ANNOUNCEMENT! See the June issue of Air Trails HOBBIES For Young Men for details on our big Cycle-Photo Contest. It's easy to enter. Top prizes will be 26-inch A.M.F. Flying Falcon bicycles featuring 3-speeds, hand brakes and specially modified tires for both city street and cross-country traveling!

The uninitiated may be startled at what can be done in the competitive sport of cycling: Last July, 28-year-old Pierre Bobet won the Golden Jubilee Tour de France averaging 21.5 mph for the 2,782-mile race. The run was completed in less than 130 hours. One week last August two British women cyclists jarred some records loose. Mrs. Edith Atkins, mother of an eight-year-old daughter, pedaled 871 miles in a little over 42 hours, and Mrs. Eileen Sheridan, mother of an 11-year-old son, covered 444½ miles in a single 24-hour stretch!

Aside from the individual physical achievements, records such as these prove that the modern, lightweight, geared bike is truly a marvelous machine. For touring it may have flat or raised handlebars ("bars" or "bends"); in competition they will be flat or underslung, and never wider than the rider's shoulders. Simple or more advanced types of gear shifting vastly improve efficiency and cycling ease. Dimensions between and relative angles of seat, bars, bottom bracket (sprocket center) are carefully tailored to the rider's physical dimensions. Battery- or generator-operated lights are available in great variety along with kerosene and carbide lamps. Seats and bars come in many types.

Before we leave the erroneous impression that any young cycle fan must acquire a foreign-made lightweight machine, let us say that the standard heavy-duty, balloon-tired American bike has special merits of its own. It is exceptionally rugged and though oft-times abused in use, with proper care can deliver long and dependable service. American bikes of finest quality are being made today which compare favorably with imported machines—lightweights with all the desired features, and this somewhat recent development paves the way for renewed interest in cycling in this country.

FRAME NOMENCLATURE: 1) seat tube; 2) seat stays; 3) seat post; 4) top tube; 5) fork tube; 6) head tube; 7) fork crown; 8) fork blades; 9) front fork ends; 10) down tube; 11) bottom bracket; 12) chain stays; and 13) rear fork ends. "CALIPER" BRAKE is simple, foolproof, works on special flat sides of rims, fitted to both wheels. "Cantilever" brake is modification with greater leverage.

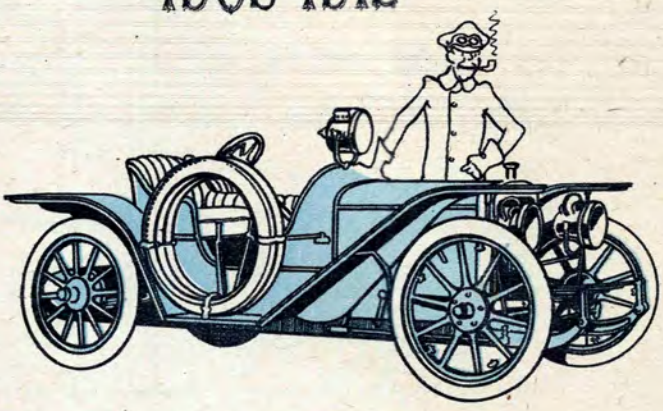


AUTO Progress

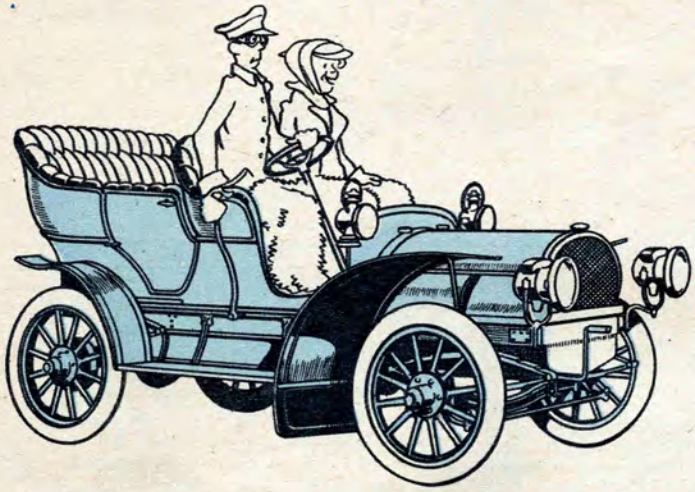
By DOUGLAS ROLFE

MEMORY LANE

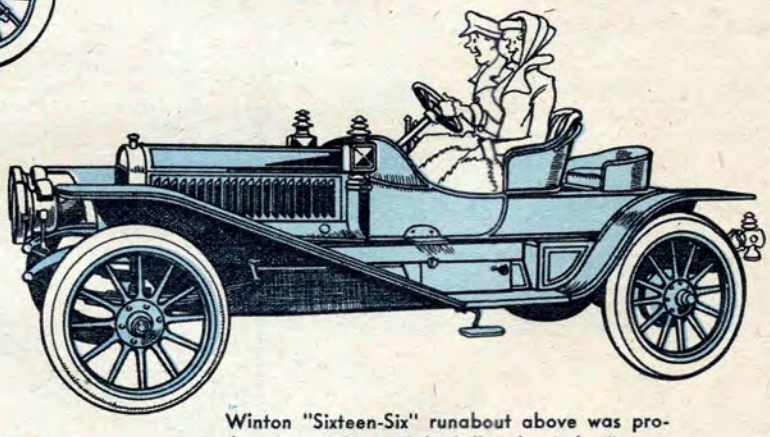
1905-1912



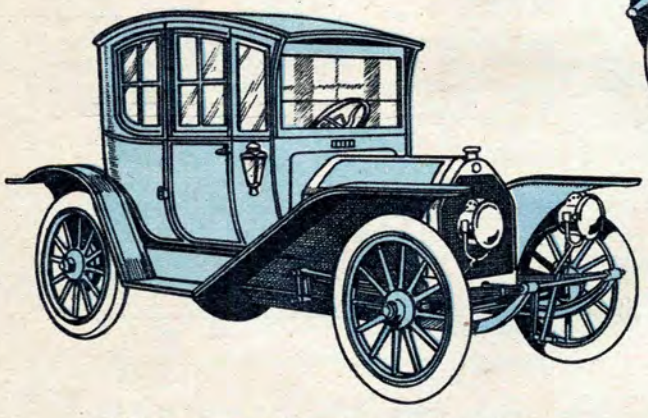
American Motor Company of Indianapolis marketed this 4-cylinder 40 hp roadster in 1907. Underslung frame gave it racy look.



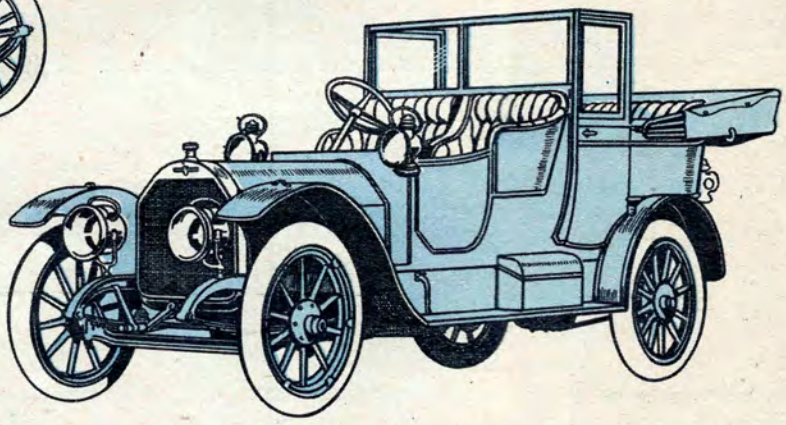
Marmon was one of the earliest and finest U.S. autos. 1905 model shown here had 4-cylinder air-cooled engine. Nordyke and Marmon ceased to build cars in 1933.



Winton "Sixteen-Six" runabout above was produced in 1908 and had "mother-in-law" seat then in vogue. Winton Co. founded in 1897.



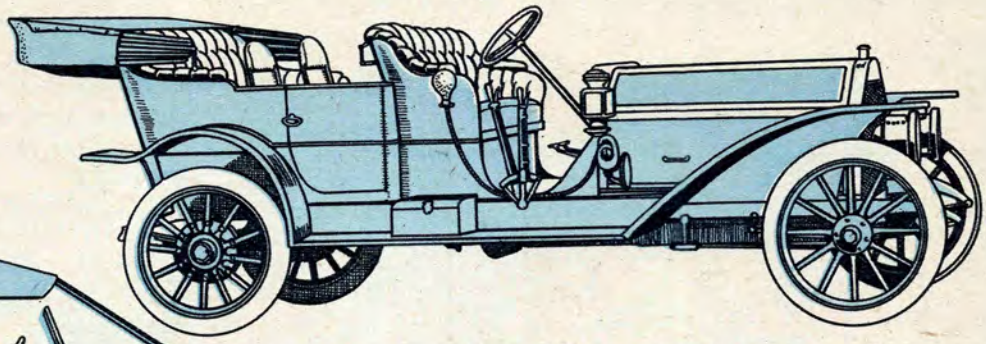
Regal cars had a brief success. First appeared in 1911, the last in 1915. 1911 coupe illustrated here had top-heavy appearance despite underslung frame typical of Regal cars.



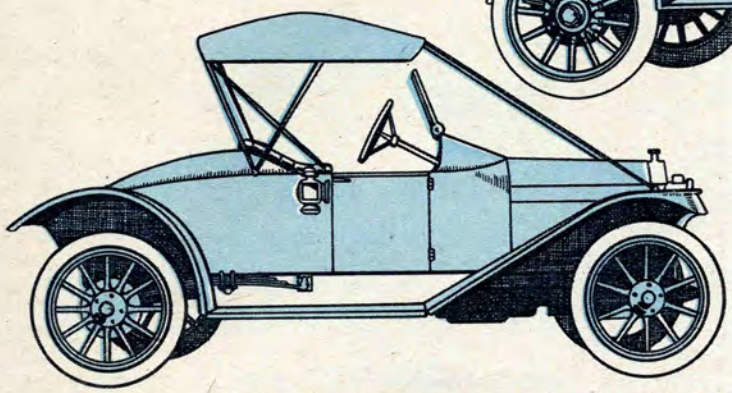
Matheson Silent-Six was another fine pioneer U.S. automobile. Car here was produced in 1912—one year before the company expired.

Of the more than 2,000 different makes of cars produced in the United States since the first automobile was marketed here, only a handful have survived and strangely enough some of the very best makes were early victims in the savage competition which developed quite soon in the automobile industry. (Naturally, many were best forgotten.) Who now can remember in detail the Winton, the Marmon or the Stutz? Three of the finest cars anywhere in the world in their day! What of the Pierce-Arrow—at one time synonymous with luxury and wealth? Then, the hordes of lesser make cars—Regal, Templar, Apperson and so on down the list—all gone with the high speed of auto progress.

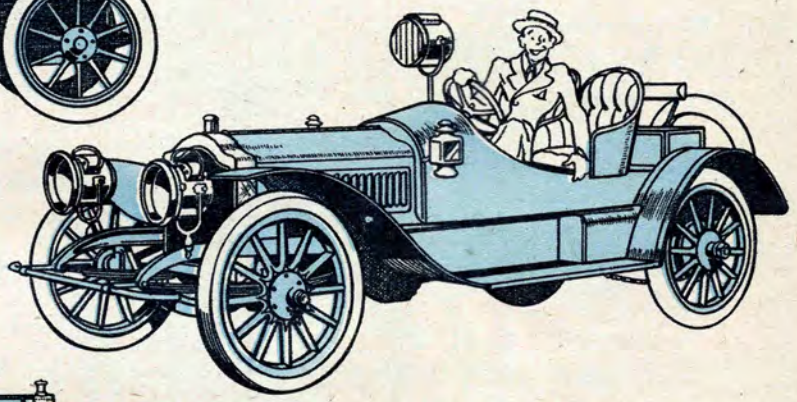
Almost forgotten today, these great cars showed way to speed, comfort



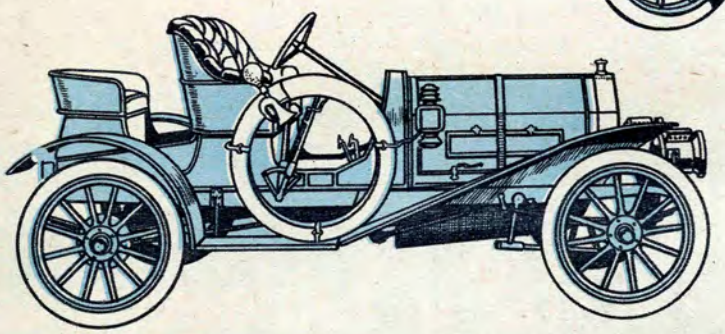
Stevens-Duryea produced fine quality cars from 1902 until 1926. Model Y shown had 6-cylinder engine rated at 40 hp, seated seven and in 1910 was tops in luxury automobiles.



A forgotten name today, the King Motor Car Company brought out a number of models between 1910 and 1924. The Silent 36 roadster (sketched) was produced in 1911. Those semi-cantilever rear springs are worthy of note.

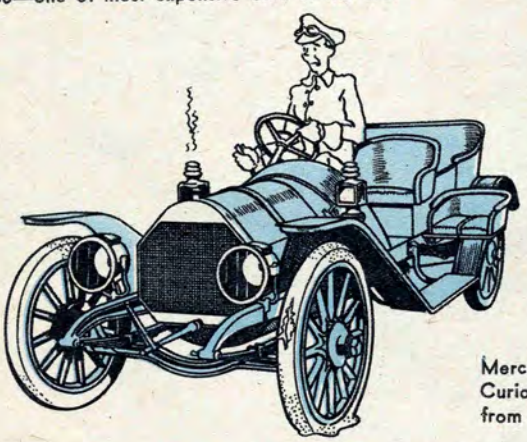


1908 Thomas Flyer roadster, chain driven. Car similar to this won the New York-Paris race that year. Flyers renowned for reliability.



This Craig-Toledo 1907 roadster sold for about $4,000—one of most expensive cars of the era.

High-wheelers lasted until 1909. Holsman shown above was powered with a 10 hp air-cooled engine, had cable belt transmission.



Mercer was at one time chief U.S. sportscar. Curious extra side seat was probably copied from French cars of the same period.

The first popular low-priced cars were the old high-wheel type such as the Holsman illustrated on these pages. Little more than powered wagons or buggies, they were of limited use except in flat country since they completely lacked gears as we understand them today. The transmission of such cars usually consisted of a cable belt drive which could be slipped or tightened for idling or driving. The high-wheeler continued in vogue until about 1909 when the first Fords started to push them off the market. Other make cars had by this time arrived at the point of refinement where they can be recognized as the ancestors of today's automobile. Many of the top makes could easily do 60 miles per hour.

Mom: when bench is not in use, top lowers over work surface, concealing construction débris. Nice feature?

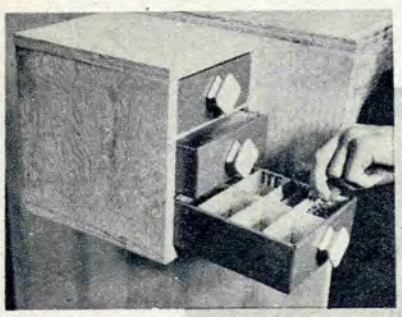
■ With about $14 worth of plywood you can duplicate this 2-purpose workbench. Get your lumber dealer to cut the wood to size during a slow period. Sizes are only approximate; change to suit your own needs. Empty dope bottles hold small fittings and accessories. Instrument tray is stored inside work area when top is down and bench not in use. Wire bench so soldering iron outlet is turned off when light is unlit. Suggestion: lock will keep out little fingers when you're away—which protects both your property and the little fingers.

Bill of Materials. Following is ⅝" thick plywood (in inches): 3x7, bench hinge rail; 24x38¼, bench top; (2) 24x30, bench sides; 37x40, bench back; (2) 9x9, drawer compartment sides; (2) 7½x9, drwr. comp. backs; (4) 8¾x9, drwr. comp. tops, bottoms; (2) 6 tapering to 12x22⅞, drawing board sides; 12x37, "B"; 25½x38¼, "A"; 6x37, drawing board front. Masonite: ⅛ inch thick—(4) 7¾x8⅜ drwg. comp. shelves; (2) 11½x17½ tray bottoms. Tray plywood, ¼" thick, (2) 2x12; (2) 2x18. Piano-type hinge, 36". Pine tool rack, 2" sq. Tray cleats, ½x½x12".

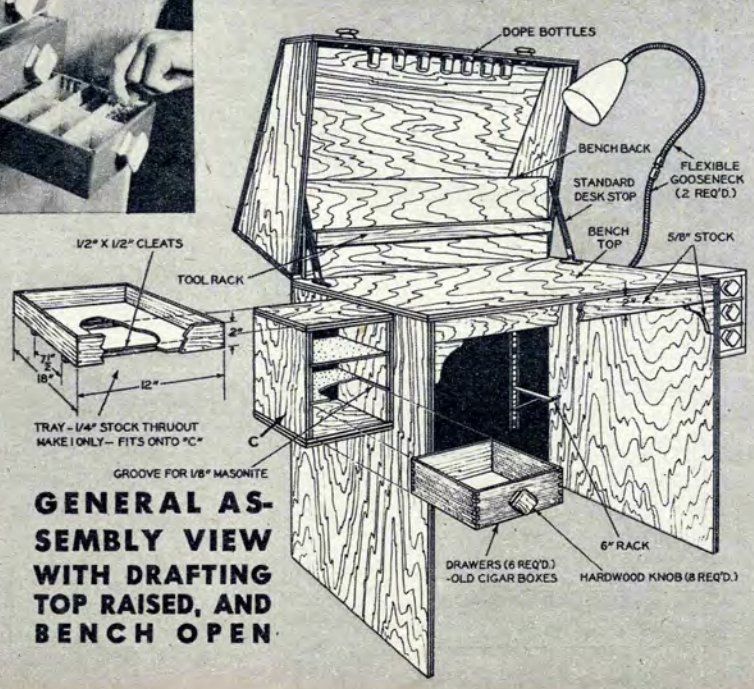
Bench is assembled with Weldwood glue and finishing nails. First glue all surfaces that join, following instructions furnished with the glue. Then nail together, countersinking nail heads. Permit to dry overnight; fill in nail holes with Plastic Wood.

TYPICAL HOME AND SCHOOL SHOP PROJECT WINNER

Workbench-Drafting Table Combo



Drawers are cigar boxes, ⅛" balsa compartments. Tools shown above are X-acto's, from 35¢ to $6.50.



GENERAL ASSEMBLY VIEW WITH DRAFTING TOP RAISED, AND BENCH OPEN

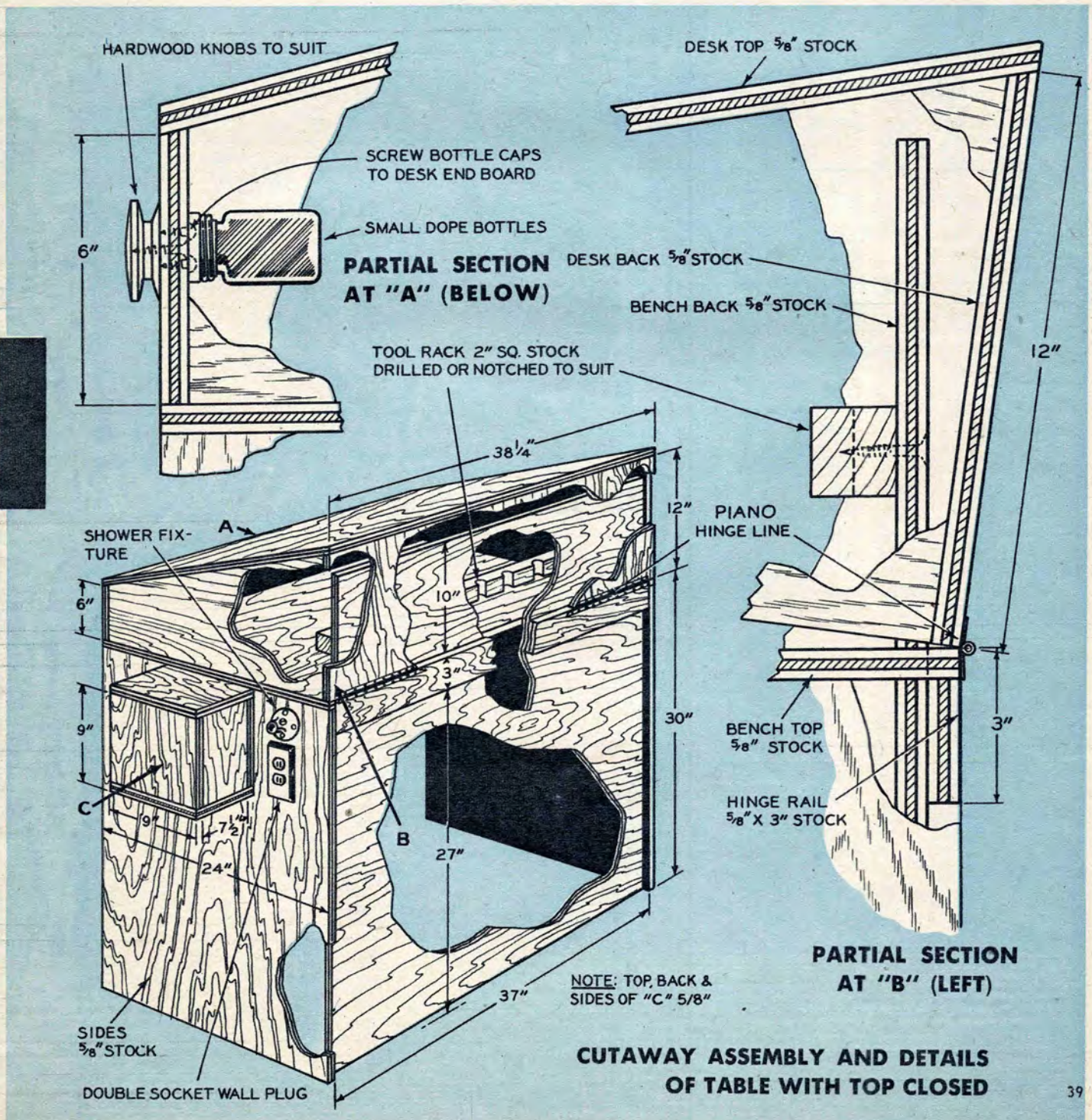
Home and School Shop Project Awards

$50 to the Talent Reporter

■ Each issue we will present a $50 cash award to the individual who has brought to our attention the winning original shop project submitted by a school shop teacher or a home shop craftsman. The "Talent Reporter" can be of any age as can be the winning shop designer whose project is selected as best for the month. The project should be an item of special usefulness or decorative value and within the abilities of the average shop student or home workshop fan. Rare or hard-to-obtain materials should be avoided. Send your nominations to Shop Project Award, c/o Air Trails HOBBIES For Young Men, 304 East 45th Street, New York City 17.

$50 to the Teacher or Craftsman

■ Each issue we will present a $50 cash award to the school shop teacher or home shop craftsman whose winning original shop project has been brought to our attention by a Shop Project Talent Reporter. If the editors find your project of sufficient interest to present here after it has been called to their attention by a Talent Reporter, you will get full information on how to prepare rough drawings. The sample projects illustrated should start you thinking—what type of item can be completed in the school or home? is it of special interest to young fellows with mechanical aptitude? will it tie in with their hobbies?



High School Grads into..

He just soloed! Fellow cadets at Spence AB in Georgia give traditional heave-ho into base swimming pool to pilot trainee who showed 'em how in reliable T-6 Texan.

■ How would you like to be earning $5,000-plus annually only one year from the time you start your first job after leaving high school—and be paid liberally while you're learning the business? That is exactly what you can now do if you can qualify as an Aviation Cadet in the United States Air Force and if you make the grade as a fly boy. According to a recent change in regulations you don't need two years of college or its equivalent to sign up for pilot instruction. All that's required is a H.S. diploma!

This new windfall for America's career-minded young men applies *both to those who want to be pilots and those who want to be observers,* the *two separate categories* in the Aviation Cadet program. At the end of training in either category, with silver wings and a Second Lieutenant's commission all yours, you agree by the signed contract to serve in the USAF for a period of three years. After the enlistment is up, you may decide to return to civilian life or continue your advancement in the "New Look" A-minded Air Force.

And note this: As a pilot trainee, you *now* receive

It's not all airplanes and classrooms—a hard-working student needs his recreation too. These cadets decided to enjoy some of the scenery and companionship at dude ranch near Williams AFB, Ariz.

If you are to receive jet training, your first plane will be the Lockheed T-33 two-place indoctrination job. Here an instructor gives final runway briefing with map before a practice mission.

AIR FORCE PILOTS

NOW you don't need two years of college for Aviation Cadet—pilot or observer. Earn $5,000 per just one year after entering!

your 2nd "Loot's" commission and the pay and allowances that go with it before the end of your training period. And also this: Applicants for observer training may *now* wear glasses if necessary. The main general requirements to be accepted for training in either category are that you must be 19 to 26½ years of age, single, have that high school diploma, and possess high moral and personal qualifications. The latter include aptitude tests and those for physical condition, which must be good.

Just what happens after you sign on the dotted line and are accepted? What gives at the various bases where you'll learn the job? Who decides the kind of planes you'll fly in? Will you be a jet "Tiger" or serve aboard a transport? Let's swing around the country and look in—sort of sweat and thrill in a that's-me-even-though-I'm-just-watching way as at a good adventure movie.

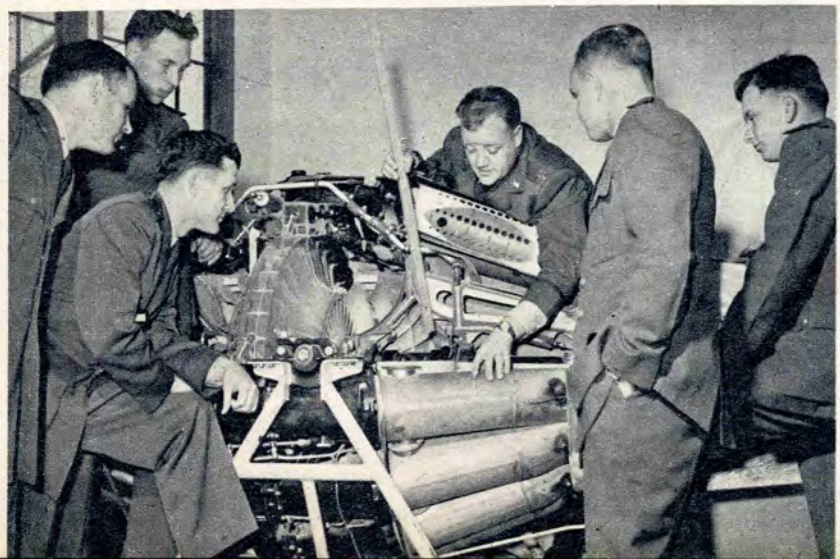
First, however, let's clear up the term "observer." In case you're hazy as to its definition, today's "Aircraft Observer" means the navigator—*and* much more. Not only is he responsible for "guiding" the plane to its target or destination and back; he is the man who drops the bomb (including atomic types), jams the enemy's radar, helps defend the plane from attack. Skilled in electronics, trained in mechanics and engineering, he is a crew member of composite abilities whose role is vital.

According to the latest revised setup, the Aviation Cadet learning to be an observer gets a navigator's rating (and his commission) after successfully completing 13 months of training from the time he takes off civvies. After this period of training, in a phase called Advanced Training (*Continued on page* 66)

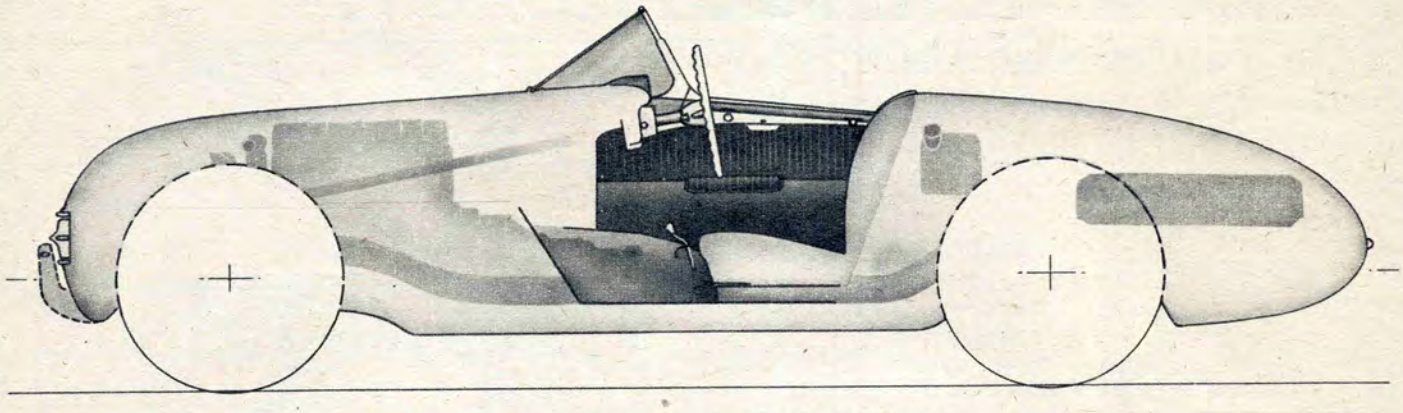
You may be slated for the big transports or bombers, train on B-29 Superfort such as commanded by this Korean vet. Top: T-28.

High upstairs in T-29 "flying classroom," observers cadets learn all phases of navigation. You'll get radar—much electronics.

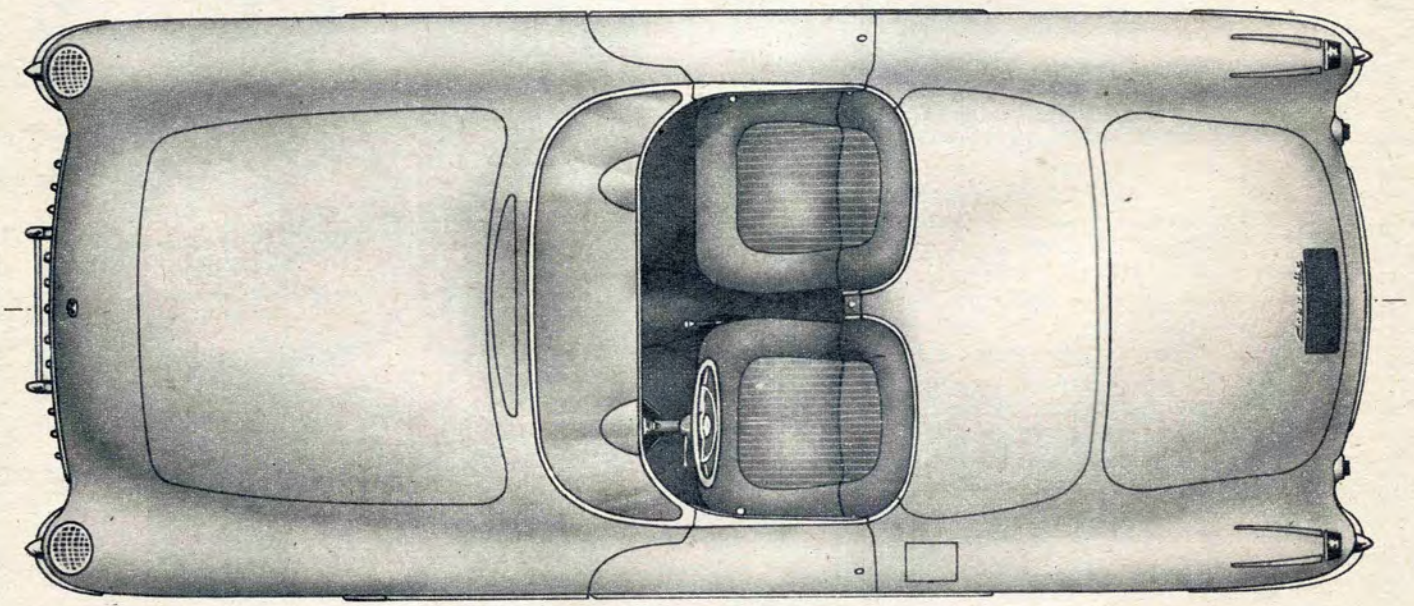
You get acquainted with engines in classrooms on the ground—from the inside out. Instructor explains workings of jet powerplant. You take military law, management, various aspects of leadership.

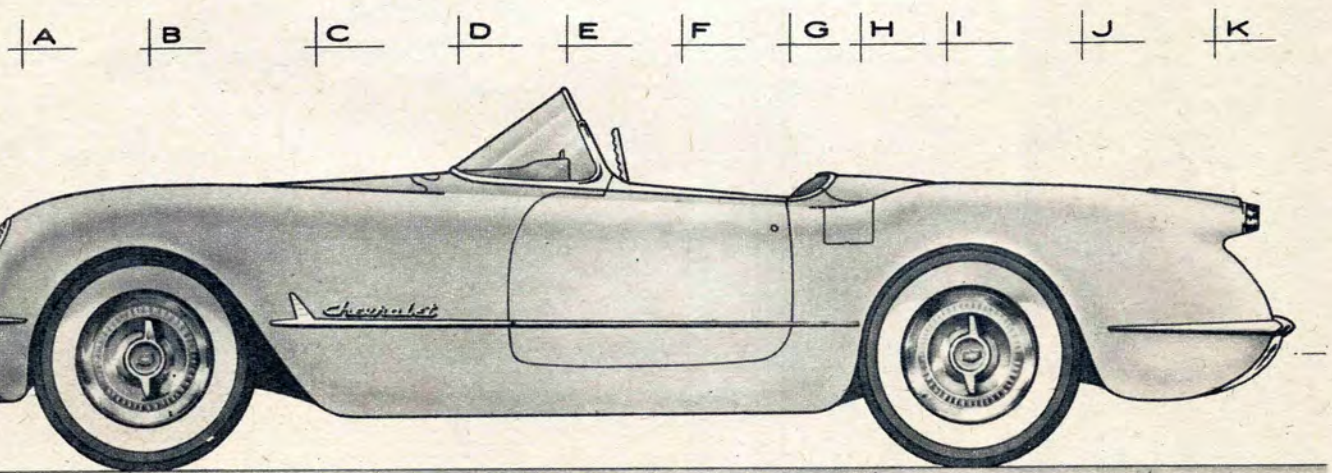


For the sports car enthusiast who wants snap, performance and beauty, Chevrolet has the answer in the powerful, low-slung Corvette

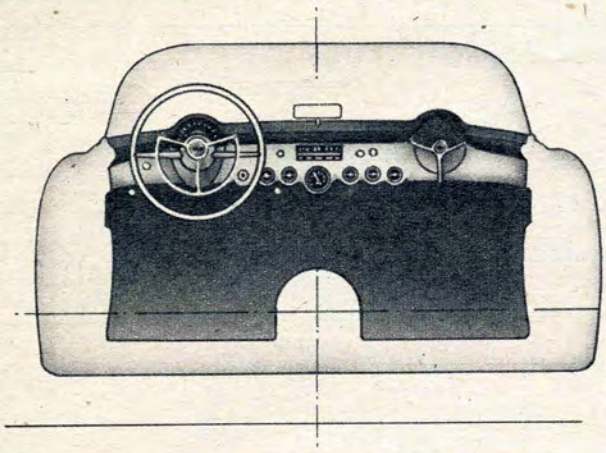


LONGITUDINAL SECTION AT CENTER LINE

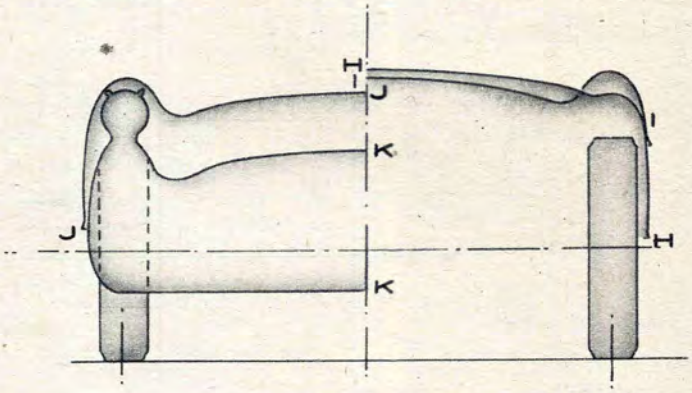




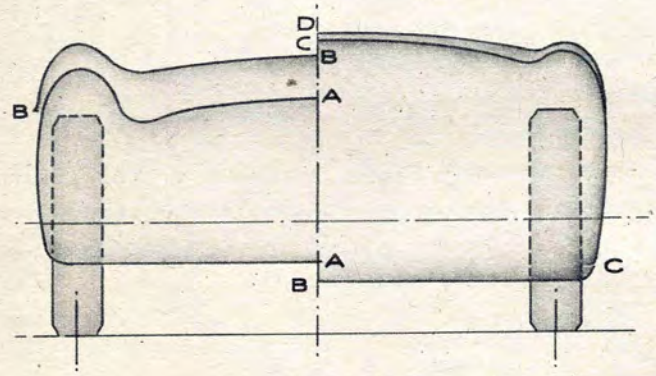
U.S. automotive industry is slowly getting back into sportscar field. First in production was Chevrolet with the fiberglass-bodied Corvette. Powered by the Chevrolet 6-cylinder engine with 8:1 compression ratio, high-lift cams and three carburetors, developing 150 hp and weighing 2850 lbs., the car should be good for 125 mph.



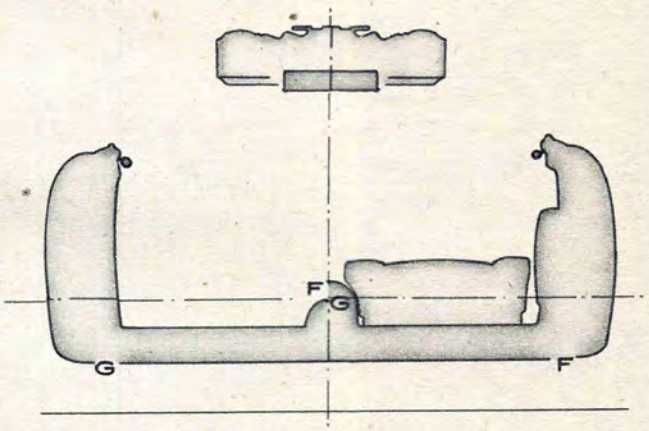
SECTION E
INSTRUMENT PANEL



SECTION H,I,J,K

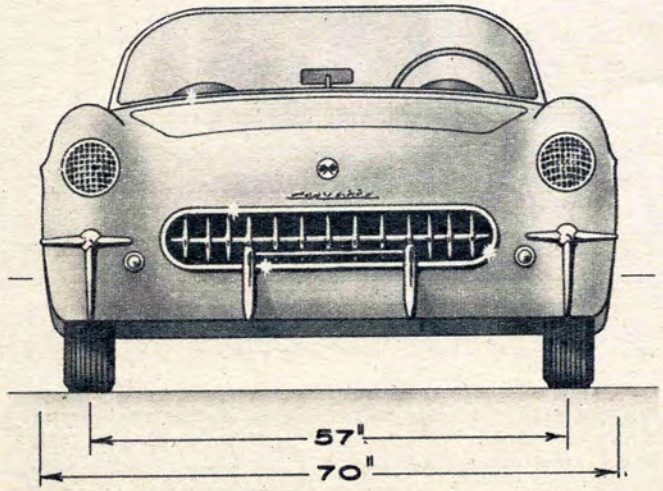


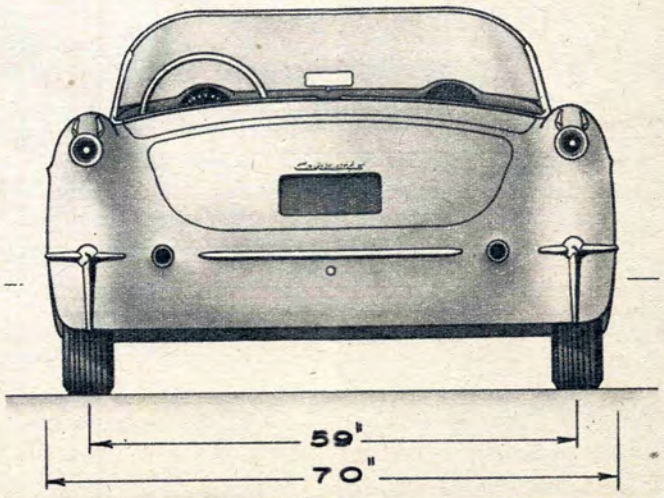
SECTION A,B,C,D

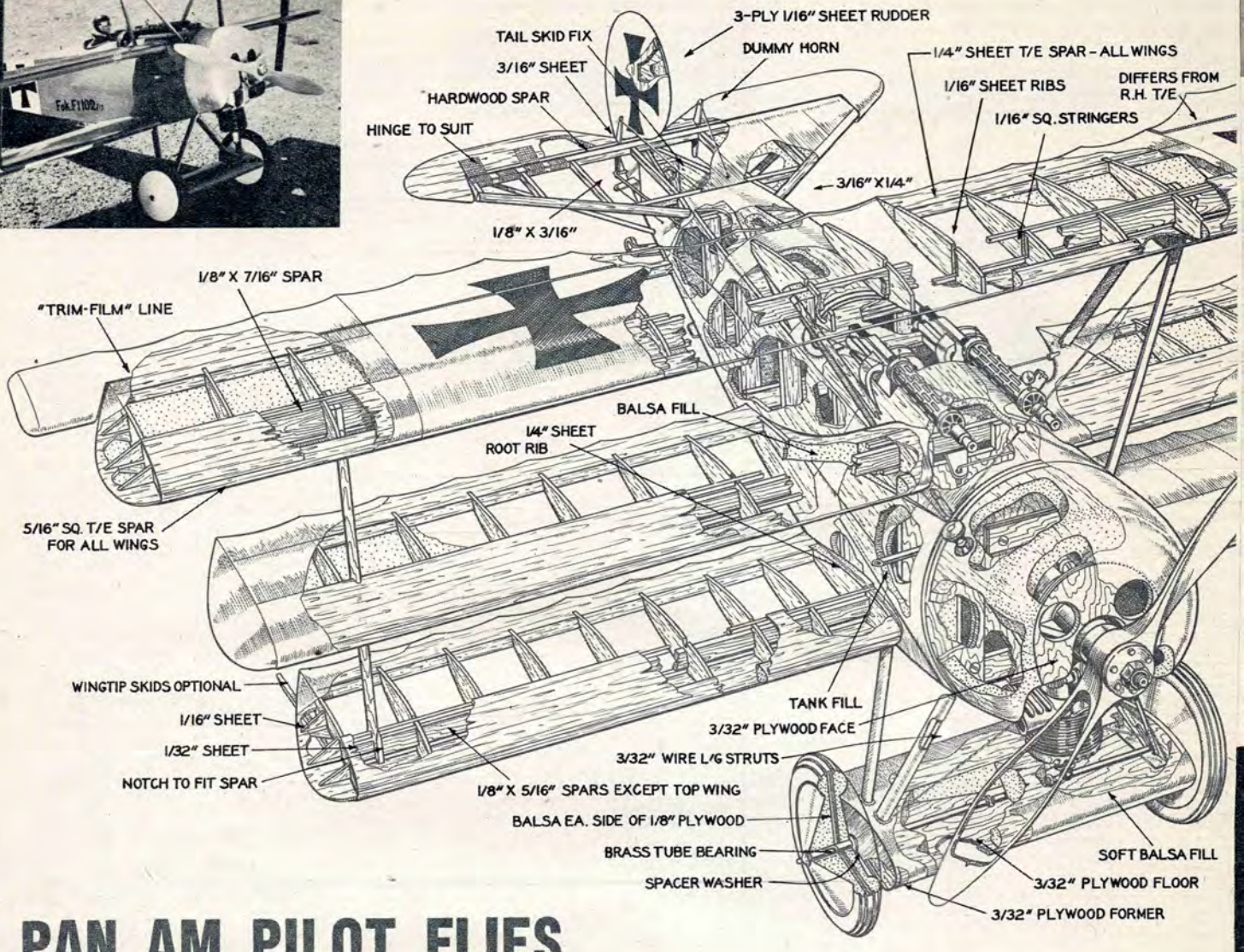


SECTION F,G

JEFFERIES







PAN AM PILOT FLIES

King Size Fokker Triplane

■ Tony Fokker's 1917-18 Triplane has been our favorite World War I airplane for a long time. This model is good looking, scale and an excellent control line stunt ship.

Built on a scale of 1½ inches to 1 foot, it spans 35½"; with three wings stacked up you have 424 square inches of lifting surface! Our model was wired for ignition with two-speed engine control and "flew off the drawing board" weighing 48 ounces with an ignition coil, condenser, batteries and a Veco two-speed relay! A glow-plugged "60" should not weigh that much no matter how much "beefing up" you do —so all you will need to fly the full stunt pattern is nerve and a reliable engine.

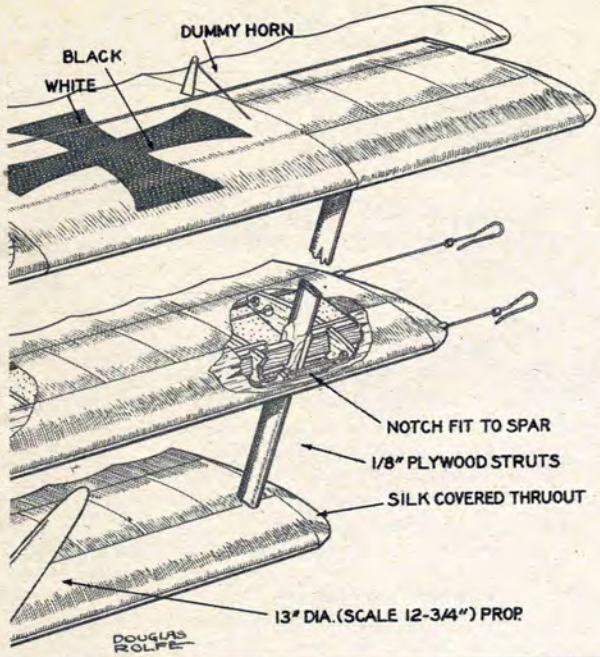
Construction is simple but build carefully—half the appearance of this ship depends on accurate alignment of the wings.

Final assembly is unusual in that all components—the individual wings, the rudder, the elevators, cowling and landing gear—are completely finished to final doping before assembly to the fuselage.

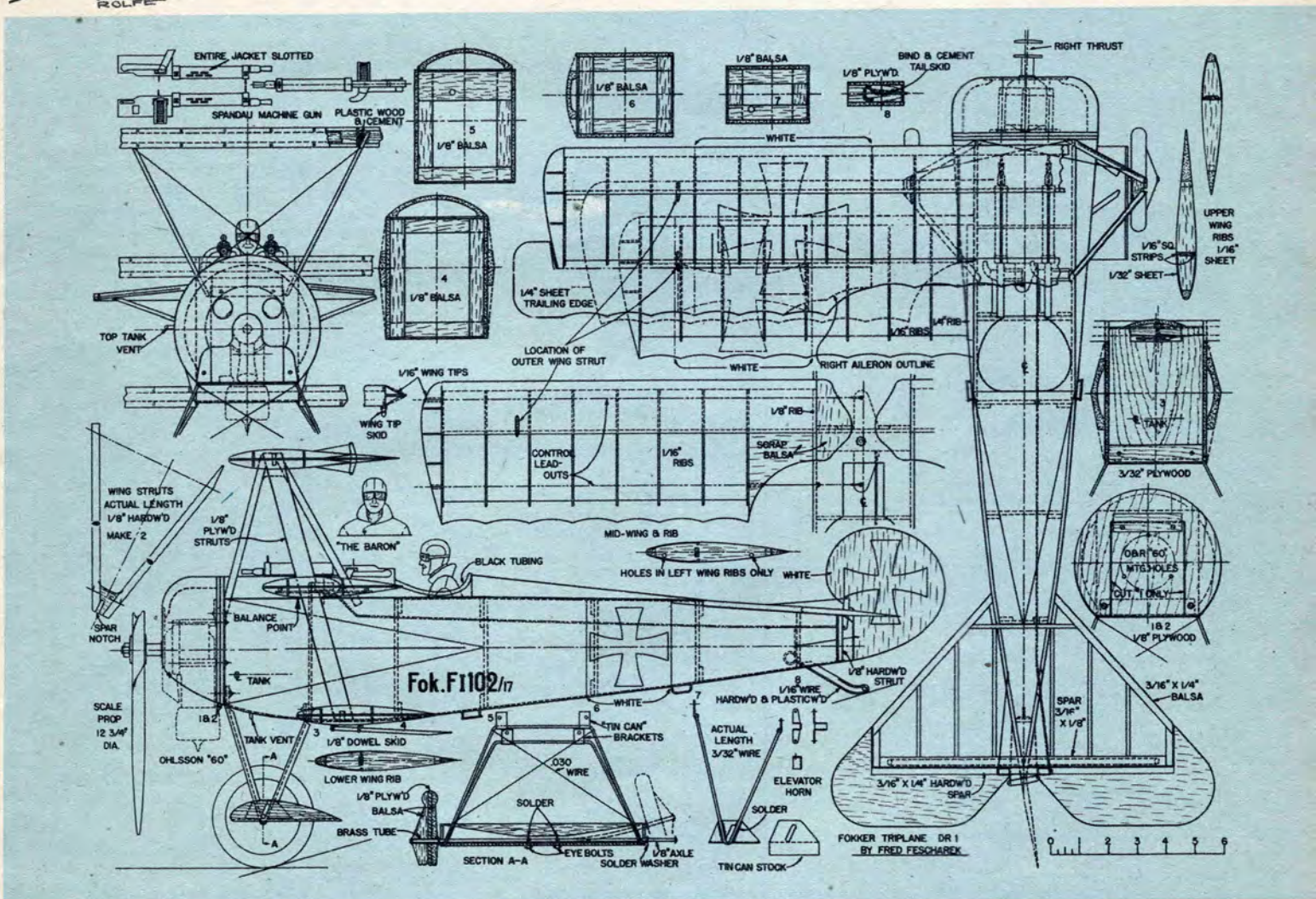
One of the nice things about World War I aircraft models is that you can let yourself go on the color scheme. The coloring was up to the individual pilots in most instances, so any color or combination of colors you want is perfectly legal. Ours was intended to be a copy of Baron von Richthofen's tripe, so we made it all red with a white rudder and white squares outlining the black Maltese crosses. The engine cowling is aluminum and the wheel-discs are white. The lettering, which appears on both sides of the fuselage, was on Richthofen's and may be omitted if you don't care for it.

Complete construction details are available on the full-size plans.

Full-size plans for the Fescharek-Fokker Triplane are included in Group Plan #554, by Hobby Helpers, 770 Hunts Point Ave., New York 59, N. Y. (50c) with data.

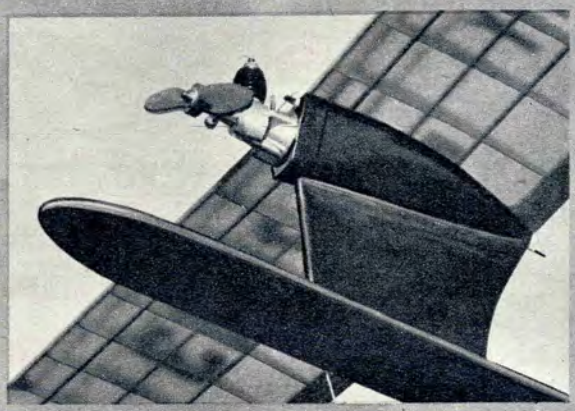


The Author: FREDERICK FESCHAREK, N. Plainfield, N. J. "Highball" is Coke, Luger is scaled in balsawood, but Fred is honest-to-goodness Pan American World Airways DC-6 pilot on NYC-Johannesburg run. Flew B-24's and B-17's with 8th Air Force; started flying in CPTP's '40 program, began modeling in '27. Member of "Le-Rec" Flyers of Dunellen, N. J. (that's where ATHFYM is printed). Wife's name is Vivian; son David's 10, daughter Janet's 12.



HI-SPY
California Contest Plane

From out of the west comes this ultra simple high-performance engine-in-wing pylon by Hal Roth



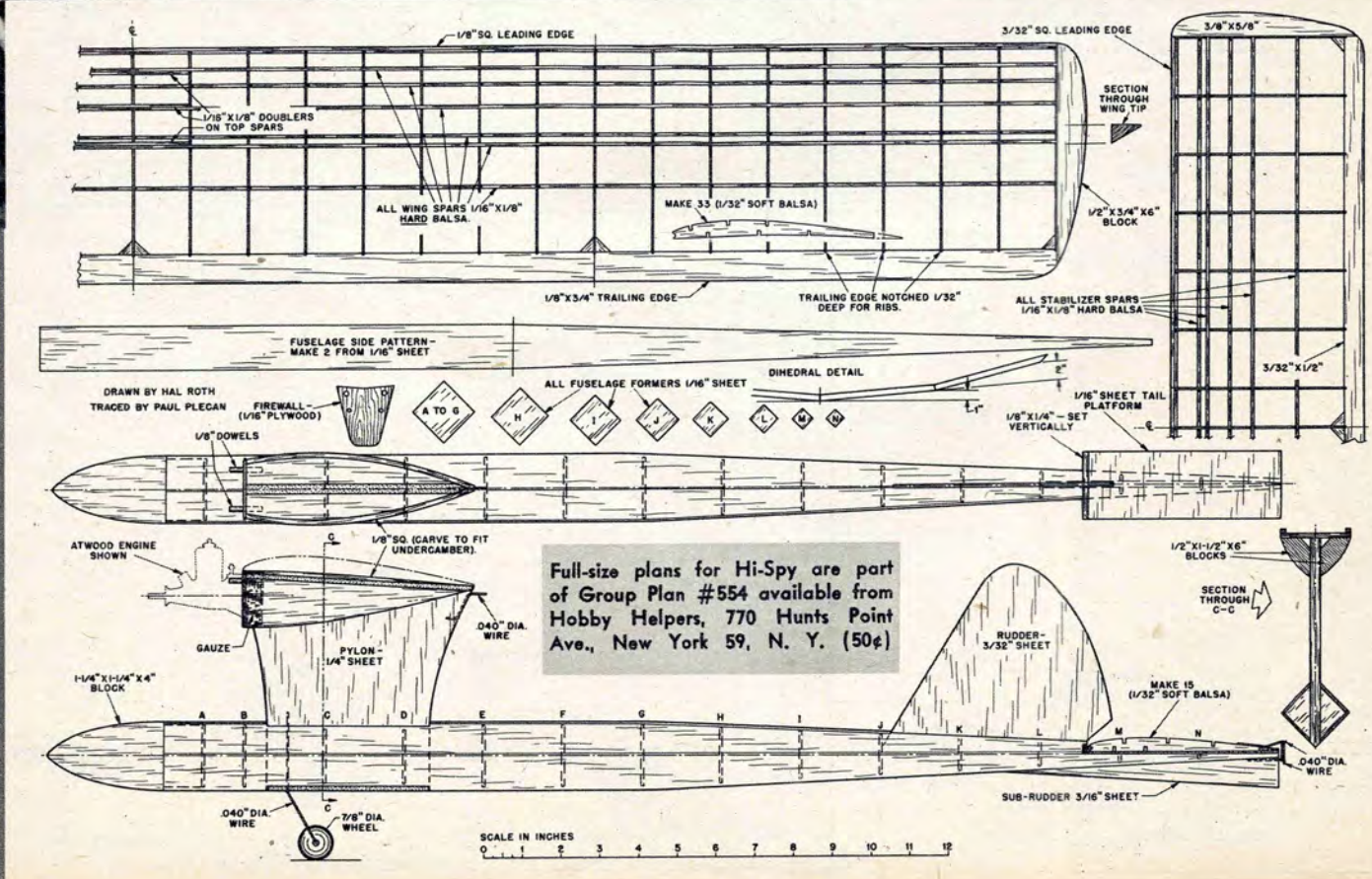
■ To win contests you've got to get 'em up high—and do it often. Most conventional models entered in competition have plenty of potential climb but usually waste at least half of it doing loops, dangerous spins, fall-offs, stalls and other maneuvers better left for the control line stunt flyers.

Hi-Spy's best and smartest attribute is a grooved climb. The model climbs straight, no turn, no loop, no violent circles, no wasted power. Just up. Up at 75 degrees for the full 20 seconds of motor run. When the motor shuts off, the ship is high enough to glide for five minutes.

No fooling! Try this high engine pylon set-up. Take any pylon model you have and mount the fan up high and go see for yourself. Adjusted to climb straight, the ship ascends without any lost motion, using all the forward impetus to build up climbing speed. There is no looping or spinning tendency because the propeller slipstream (methinks) is *above* the pylon, fuselage side area, and rudder.

Hi-Spy is big for a Half-A model. The wing has 300 square inches of area, but don't try .099 engine; too powerful.

Complete construction details available on full-size plans.


1/8"SQ. LEADING EDGE
3/32"SQ. LEADING EDGE
3/8"X5/8"
1/16"X1/8" DOUBLERS ON TOP SPARS
SECTION THROUGH WING TIP
ALL WING SPARS 1/16"X1/8" HARD BALSA
MAKE 33 (1/32" SOFT BALSA)
1/2"X3/4"X6" BLOCK
1/8"X3/4" TRAILING EDGE
TRAILING EDGE NOTCHED 1/32" DEEP FOR RIBS.
ALL STABILIZER SPARS 1/16"X1/8" HARD BALSA
FUSELAGE SIDE PATTERN - MAKE 2 FROM 1/16" SHEET
3/32"X1/2"
DIHEDRAL DETAIL
DRAWN BY HAL ROTH
TRACED BY PAUL PLECAN
FIREWALL - (1/16" PLYWOOD)
ALL FUSELAGE FORMERS 1/16" SHEET
A TO G
1/16" SHEET TAIL PLATFORM
1/8"X1/4" - SET VERTICALLY
1/8" DOWELS
ATWOOD ENGINE SHOWN
1/8"SQ. (CARVE TO FIT UNDERCAMBER).
1/2"X1-1/2"X6" BLOCKS
SECTION THROUGH C-C
.040" DIA. WIRE
GAUZE
PYLON - 1/4" SHEET
RUDDER - 3/32" SHEET
1-1/4"X1-1/4"X4" BLOCK
MAKE 15 (1/32" SOFT BALSA)
A B C D E F G H I J K L M N
.040" DIA. WIRE
SUB-RUDDER 3/16" SHEET
.040" DIA. WIRE
7/8" DIA. WHEEL
SCALE IN INCHES
0 1 2 3 4 5 6 7 8 9 10 11 12

Full-size plans for Hi-Spy are part of Group Plan #554 available from Hobby Helpers, 770 Hunts Point Ave., New York 59, N. Y. (50¢)

Air Trails

FULL SIZE PLANS

PLANS OF THE MONTH

Group 554

HI-SPY by Hal Roth. Unusual, appealing Half-A Atwood engine-powered free flight contest plane from California. Pylon type, engine mounted in wing! Spans 49 inches, overall length 32 inches.

WHATIZZIT by Frank Ehling. Remotely operated radio controlled amphibian military truck and boat. Driven by air prop, can be run on land or in water. Simplified steering mechanism is a cinch to make. Uses any standard R/C receiver. Has 6.5 inch beam, 23 inch overall length, 15.5 inches high. Cub .074 diesel engine or equivalent.

FOKKER TRIPLANE by Fred Fascherek. Pan American World Airways pilot. This is a sling-size control line flying scale of the famous German fighter of World War I. O&R .60 engine or equal. Spans 35 inches, is 28 inches overall.

Only **50c** for complete group

Group 554A

WALT GOOD'S Non-Selective 3-tube 27 mc. audio receiver for radio control use. Dr. Good's latest effort in the R/C field. Full size patterns and helpful photos, plus circuits.

MAC II Hi-Power 5-Watt Transmitter by Howard McEntee. Full size chassis drawings and all dat- for duplicating Mac's famous top-power xmtr.

MINI-MAC Hard Tuber by Howard McEntee. Simplest thing in non-gas type receivers by the old master himself. Utilizes sub-miniature CK526AX tube.

Only **35c** for complete group

B-BAR-B BUNKHOUSE
Group 554B-B

Build your own scale model copy of the famous Bobby Benson B-Bar-B Bunkhouse from which are broadcast the famous B-Bar-B Riders programs coast to coast on the Mutual Broadcasting System. Prizes for the best models!

Only **25c** each

For Special Handling of Plans: Add 9c per group for 1st Class mail and 18c per group for Air Mail.

From the pages of March 1954 Air Trails

GROUP 354

"HIGH-Q" — Jack Port's National Championship Radio Control Plane, winner of the famous R/C Trophy at the Philadelphia "Nats." Spans 54 inches, fuselage is 40 inches overall; takes .19 engine. Won with rudder-only control!

MARTIN MERCATOR P4M-1 multi-engine Navy bomber as fine control line scaler by Frank Lashek. One of easiest 2-motor models we've seen! Powered by two .19 engines; spans 49 inches. Fuselage is 37 inches overall.

from the Air Trails Model Annual for 1954

GROUP ATA 542

"LITTLE FREAK" #27 — Dale Roof's remarkable plane flown with Thermal Hopper engine. Spans 44 inches, has 30 inch fuselage. Widely duplicated on West Coast, has successful contest record. Will take Super Aerotrol or similar equipment.

XF-92A control line jet-powered flying scale model by Frank Lashek. For Dyna-Jet power. This all-white Convair delta model won acclaim at Nationals and Mirror meets. Spans 31 inches, is 41 inches long. A master project for the advanced aero craftsman.

GROUP ATA 543

"A-PAY" — Frank Ehling's PAA-Load model for Class A Competition. Takes Torp .19, spans 58 inches. Four foot fuselage. Unique stab-ahead-of-rudder design has been flown by many Eastern builders. A proven contest performer that's brought home the cash.

REPUBLIC P-47 THUNDERBOLT control line flying scale by Walter Musciano. Detailed plans give info for three versions, the "B", "D" to .35 range. Spans 32 inches, has overall fuselage length of 26 in.

Only **50c** for each complete Group

For Special Handling of Plans: Add 9c per group for 1st Class mail and 18c per group for Air Mail.

FREE

Hobby Helpers 16 page, NEW descriptive catalogue of all Available Full Size Plans and books. Enclose 6c to cover postage.

HOBBY HELPERS LIBRARY

PLEASE ORDER BY NUMBER

THE MODEL PLANE MANUAL
by Walter A. Musciano
$2.95 (M-1)

BUILDING AND FLYING SCALE MODEL AIRCRAFT
by Walter A. Musciano
$2.95 (M-2)

AERODYNAMICS FOR MODEL AIRPLANES
by Donald K. Foote
$2.00 (B-3)

MODEL AIRPLANE ENGINES
by Donald K. Foote
$2.00 (B-4)

MODEL CONTROL BY RADIO
by Edward L. Safford, Jr.
$1.00 (G-5)

1953 MODEL AERONAUTICS YEARBOOK
by Frank Zaic
$1.00 (Z-6)

MODEL AERONAUTIC ENCYCLOPEDIA
by Frank Zaic
$1.00 (Z-7)

1951-1952 MODEL AERONAUTIC YEARBOOK
by Frank Zaic
$1.00 (Z-8)

FAWCETT BOOKS

75c each

CAL SMITH ON MODEL BUILDING —No. 139
AVIATION YEARBOOK —No. 121
HOW TO BUILD 20 BOATS —No. 137
THE MODEL RAILROAD BOOK —No. 208

Collection No. 1
MUSCIANO'S FLYING SCALE MODELS OF FAMOUS PLANES

From the pages of Air Trails 24 pages; 8½ x 11 inches; specially selected paper. World Wars I and II models.

A Hobby Helpers Publication

50c each (H-15)

Basics of RADIO CONTROL for the model builder

A compilation of outstanding articles by authorities on radio control from the pages of Air Trails.

A Hobby Helpers Publication

35c ea. (H-14)

Send check or Money Order. Books will be shipped postage prepaid anywhere in the U. S. or possessions.

INTERNATIONAL STUNT CHAMP

LETHAL LUCY

LIBERTY BELLE

COMBO TRAINER

GRUMMAN PBF-2 BEARCAT

KNIGHT TWISTER

SELECTED FULL SIZE "AT" PLANS *from the Hobby Helpers catalog*

Only **50c** for each complete group

PLEASE ORDER BY NUMBER

GROUP 253R — STUKA STUNT, by Still. 47" span. DOUGLAS B-26 INVADER, by Lt. Atkins. C/L, 52" span.

GROUP ATA 523 — THE HAPPY MEDIUM, by Shailor. F/F, 70" span. THE EXECUTIVE, by Hunt. Twin Jetex, 18" span. DOUBLE WHAMMY, by Hughes. C/L Biplane, 37" span.

GROUP R101 — MAC'S ROBOT, by McElwee. R/C, F/F, 60" span. Plans and Building instructions for BEEP BOX, RECEIVER and TRANSMITTER.

GROUP 351 — CROWBAR "56", F/F by Ray Mathews. 54" span. PETIT PETE, by Beck. C/L, ½A, 15" span. WAKEFIELD MODEL, by Ehling. 53" span. AIR ADVENTURERS TRAINING GLIDERS No. 1 and No. 2.

GROUP 451—CLIPPER CARGO, C/L stunt by Musciano. 52" span. FLYING WING, F/F by Frank Zaic. 55" span. DOUBLE DUTY SKYLARK, by Grant. C/L or F/F. 32" span.

GROUP 851—NORDIC TOWLINE GLIDER, 58" span. OPEL ROCKET PLANE, by Musciano. F/F scale, 29" span. TINY TIM, by Ehling. C/L, 12" span. SCREAMIN' DEMON, by Wisniewski. C/L speed, 18" span. WITTMAN MODELS, 2 place "Buttercup" and 4 place "Big X".

GROUP 1051 — RUMPLER "TAUBE", F/F by Enticknap. Swept wing, 32" span. DUMMY LIFTER, ½A PAA Load model by Burogas. 36" span. THE FLING, Class B speed. 15" span. WEE WHIZZ WAGON, ½A speedy. 9" span. SMALL VIEW, Class D, rubber power.

GROUP 652A—BOUNCING BERTIE, C/L Triplane by Palanek. 32" span. FOKKER'S FIRST FIGHTER, C/L scale by Musciano. 20" span. O-S-O-Musciano. 20" span. O-S-O-L-O-N-G, Wakefield model by Cole. 47" span. DOUGLAS A2D SKYSHARK, 3 view plans. 10" span.

GROUP 652B — MINI-PAAGAN, F/F by Davis. 38" span. INDOOR MICROFILM, endurance stick and cabin models by DeleMaster. 34" span. OUTDOOR RECORD HOLDER, rubber powered by Brawner. 35½" span.

GROUP 752 — BRAWNER'S RECORD GLIDER, all balsa. PHILLY WHIZ, ½A F/F by Becker. 34½" span. THE GOPHER, class D speed by H. L. Davis. 17" span. CURTISS FALCON, C/L scale Bipe by Musciano. 18" span.

GROUP 1252 — C/L Flying scale World War II Triple Treat by Musciano: GERMAN ME. 109, 24" span. BRITISH SPITFIRE, 27" span. AMERICAN P-51, 27" span.

GROUP 1252A — LETHAL LUCY, by Shulman. C/L. 53" span. LIGHTNING, by Del Getto. F/F, 30" span. Detailed scale drawings of the RUSSIAN YAK-15 and SIPA-200.

GROUP 153 — HALF-PEP RACER, by Grzesszak. ½A. C/L realistic racer, 19" span. TIPPY TIM, F/F by Kochman. Endurance model, 18" span. MINOR MACH, catapult glider by Ehling. 17" span. HOUNDOG, C/L by Macy. 36" span.

GROUP 253A — BLACK TIGER, by R. W. Elliot. C/L stunt, World War II P-40 appearance. 46" span. DEHAVILLAND CHIPMUNK, by McEntree. Rubber power scale, 8½" span. AMAZON "400", by Mrs. Hill. F/F, 60" span.

GROUP 353—MARTIN B-26 World War II MARAUDER, C/L scale by Leon Shulman. 49" span.

GROUP 353A—LEAPA LENA, by Ehling. ½A. F/F. 25½" span. INTERNATIONAL STUNT CHAMP, by L. W. Curtis. C/L stunt, 25½" span. BEAUTIFUL BESS, by "Chuck" Wood. Biplane, rubber power, 38" span.

GROUP 453—CURTISS JN-4 JENNY, by Ealy. C/L scale. 44" span. "PAY-UP", by Sladek. F/F, ½A. 47" span. FIESELER STORCH FI 156. F/F, ½A by Ahramark. Scale, 46" span.

GROUP 552A—SASSY SAUCER, C/L by G. L. Harris. 25½" diameter. SWEET SIXTEENTH, F/F by Kochman. 32½" span. LIBERTY BELLE, R/C by Dick Schumacher. 42" span.

GROUP 652—All Radio Control models. MAGIC MAID, 55" span, low wing scale-like R/C plane. SQUARE SUE, twin float, air prop powered cabin cruiser, for R/C control. R/C MOBILE TV TRUCK. Complete construction details, including power plant.

GROUP 653A — LEOPARD MOTH, class A control line scale model for the famous DeHavilland by "Red" Kochman. THE BOSTONIAN, Ed Dolby's contest type rubber powered model. SABRE-WING, Don Broggini's remarkable CAR, scale replica by Kochman, building instructions and cut-away views.

GROUP 753A—R/C Wittman BUTTERCUP scale model by Frank Van Buren, Lee Reneaud's rubber powered 46" span Wakefield model. PORSCHE SPORTS CAR, scale replica by Kochman, building instructions and cut-away views.

GROUP 753B—BONZO C/L flying scale by "Cal" Smith, powered by 23 to .33. SWAN SONG F/F flying boat with 58" high wing; a realistic semi-scale model. Wittman BUTTERCUP, Frank Ehling's half A C/L or F/F small scale model.

GROUP 953 — WONDER-WINGS R/C biplane by "Cal" Smith. 44" span. Semi-scale. SALTY DOG CABINETTE R/C cabin cruiser by Frank Ehling. 27½" long. Features "easi-sew" construction details.

GROUP 1053 — DOUGLAS AD2 SKYRAIDER C/L by Cal Smith. 44" span. "X-PENDABLE" combat stunt by Saftig.

GROUP 1153 — "TAPER WING WACO" C/L scale biplane. 46" span. "ULTRA HOGAN" by Denny Davis. F/F, 60" span.

GROUP 1253 — "ROCKET RACER" C/L guided missile appearance. 18" span. "SASKIE" by A. G. Ackerman. 26½" span. Jetex. "JERSEY LIGHTNIN" by Cal Smith. R/C Goodyear type racer, 53" span.

GROUP 154—TRIMMER AMPHIBIAN, by Planek. C/L twin engine, 42" span. SWAYBACK, by CPO Hanebry, USN. F/F, ½A. 37½" span. DRAFTY JUNIOR, by Musciano. Stunt, F/F, 34" span.

GROUP 254 — MITSUBISHI ZERO, by Musciano. C/L scale model. 24½" span. NANCY, by Carlstein. Stunt, 27" span. HONEYBUG, by Ehling. C/L stunt, 22" span. BLUEBOY, by Roth. Weight lift champ. 72" span.

GROUP 254A—COMBATEER, by Aldrich. Stunt champ. 34" span. BONNIE LASS, by McBrayer. ½A team racer, 22" span.

STUNT ROCKET

CROWBAR "56"

MINI-PAAGAN

HALF-PEP RACER

Only **35c** for each complete group

PLEASE ORDER BY NUMBER

GROUP 853—BLOW BUG 3 foot span F/F pressure Jet turbine with realistic jet plane appearance. PAST DUE half A F/F with 37" span, contest winner by H. L. Robinson. FULL SIZE AIRFOIL SECTIONS. 12 of most popular airfoils in 8 sizes from 2½ to 5 inch chord.

GROUP 853A — COMBO TRAINER, Stick type, 20 inch span, all balsa, rubber powered club and instructional model. DIID AIR SPOTTER. ATTACK BOMBER GAME.

GROUP 953A— GRUMMAN F4F-4 WILDCAT C/L by Walt Musciano. ¾" to 1' scale. DEVIL DART by Tommy Baker. 18" span Dyna-Jet powered.

GROUP 953B — HAWKER HURRICANE C/L British flying scale by Musciano. ¾" to 1' scale. LITTLE AUGIE by Frank Ehling. Jetex No. 150, 22" swept-wing semi-scale fighter.

GROUP 953C — FOCKE-WULF FW 190 — German W.W. II C/L flying scale by Musciano. ¾" to 1' scale. A/2 VIKING NORDIC TOWLINE GLIDER by Bill Farrance. Hall size plans with full size ribs and cross sections.

GROUP 1053A—"BLUNDER-BUS" F/F, ½A semi-scale by Cal Smith. 30" span. "SPIRIT OF ST. LOUIS" F/F or C/L scale model of Lindbergh's ship. 29" span.

FREE

Hobby Helpers 16 page, NEW descriptive catalogue of all Available Full Size Plans and books. Enclose 6c to cover postage.

For Special Handling of Plans: Add 9c per group for 1st Class mail and 18c per group for Air Mail.

ORDER BLANK

PLEASE PRINT NAME AND ADDRESS CLEARLY. ENCLOSE COIN OR MONEY ORDER.

PLANS

50c ea. group

☐ 554
☐ 554A
☐ 354
☐ ATA 542
☐ ATA 543
☐ 253R
☐ ATA 523
☐ R101
☐ 351
☐ 451
☐ 851
☐ 1051
☐ 652A
☐ 652B
☐ 752
☐ 1252
☐ 1252A
☐ 153
☐ 253A
☐ 353
☐ 353A
☐ 453
☐ 553A
☐ 653
☐ 653A
☐ 753A
☐ 753B
☐ 953
☐ 1053
☐ 1153
☐ 1253
☐ 154
☐ 254
☐ 254A

35c ea. group

☐ 853
☐ 853A
☐ 953A
☐ 953B
☐ 953C
☐ 1053A

BOOKS

☐ M-1
☐ M-2
☐ B-3
☐ B-4
☐ G-5
☐ 139
☐ 121
☐ 137
☐ 208
☐ H-14
☐ H-15

B-B BUNKHOUSE 25c
☐ 554B-B
☐ Catalog

NAME_____

ADDRESS_____

CITY_____ ZONE____ STATE_____

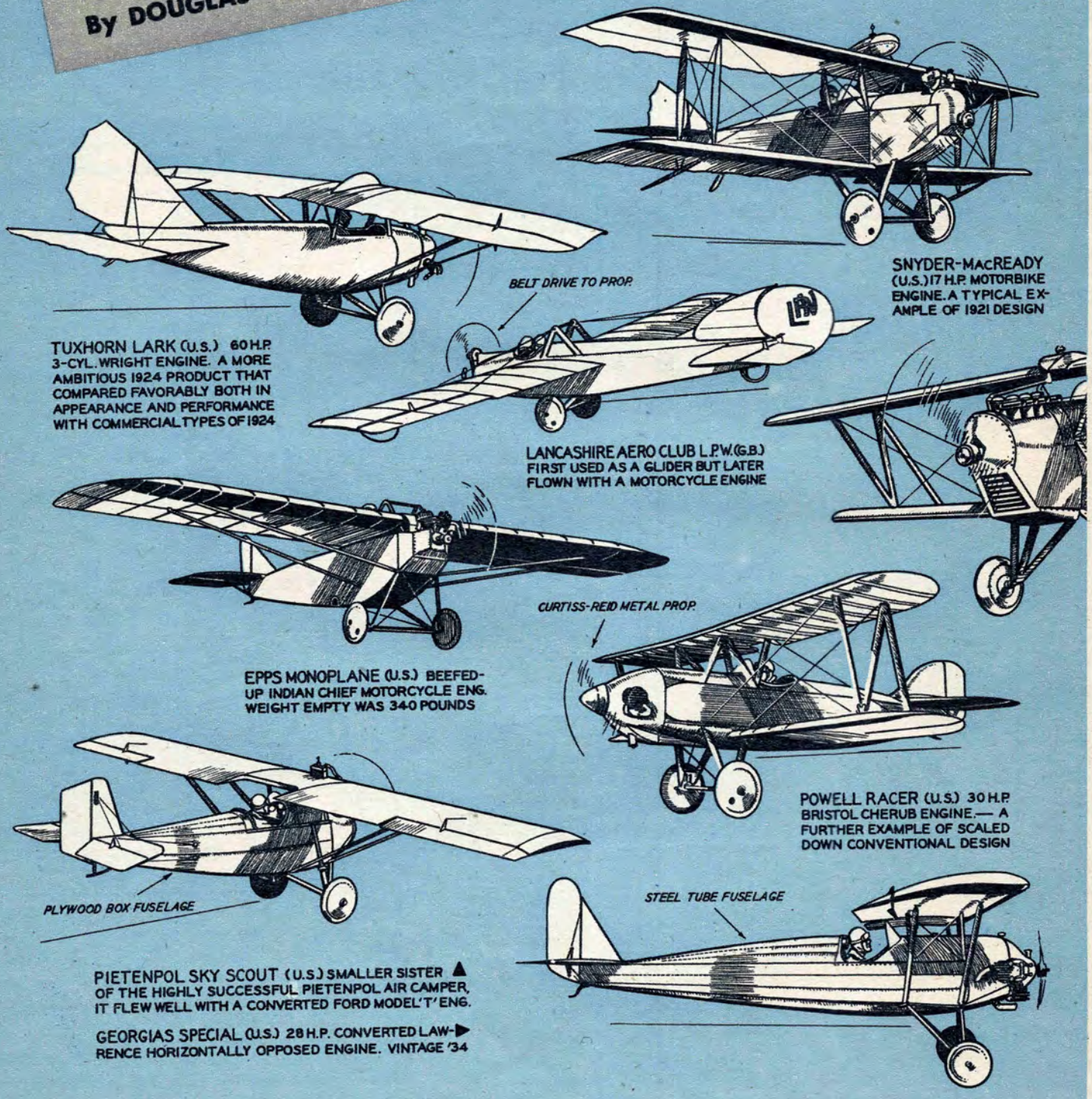
HOBBY HELPERS

770 HUNTS POINT AVENUE NEW YORK 59 N Y

AIR PROGRESS

By DOUGLAS ROLFE

These Were Outstanding Home-built Backyard Airplanes



SNYDER-MacREADY (U.S.) 17 H.P. MOTORBIKE ENGINE. A TYPICAL EXAMPLE OF 1921 DESIGN

TUXHORN LARK (U.S.) 60 H.P. 3-CYL. WRIGHT ENGINE. A MORE AMBITIOUS 1924 PRODUCT THAT COMPARED FAVORABLY BOTH IN APPEARANCE AND PERFORMANCE WITH COMMERCIAL TYPES OF 1924

LANCASHIRE AERO CLUB L.P.W. (G.B.) FIRST USED AS A GLIDER BUT LATER FLOWN WITH A MOTORCYCLE ENGINE

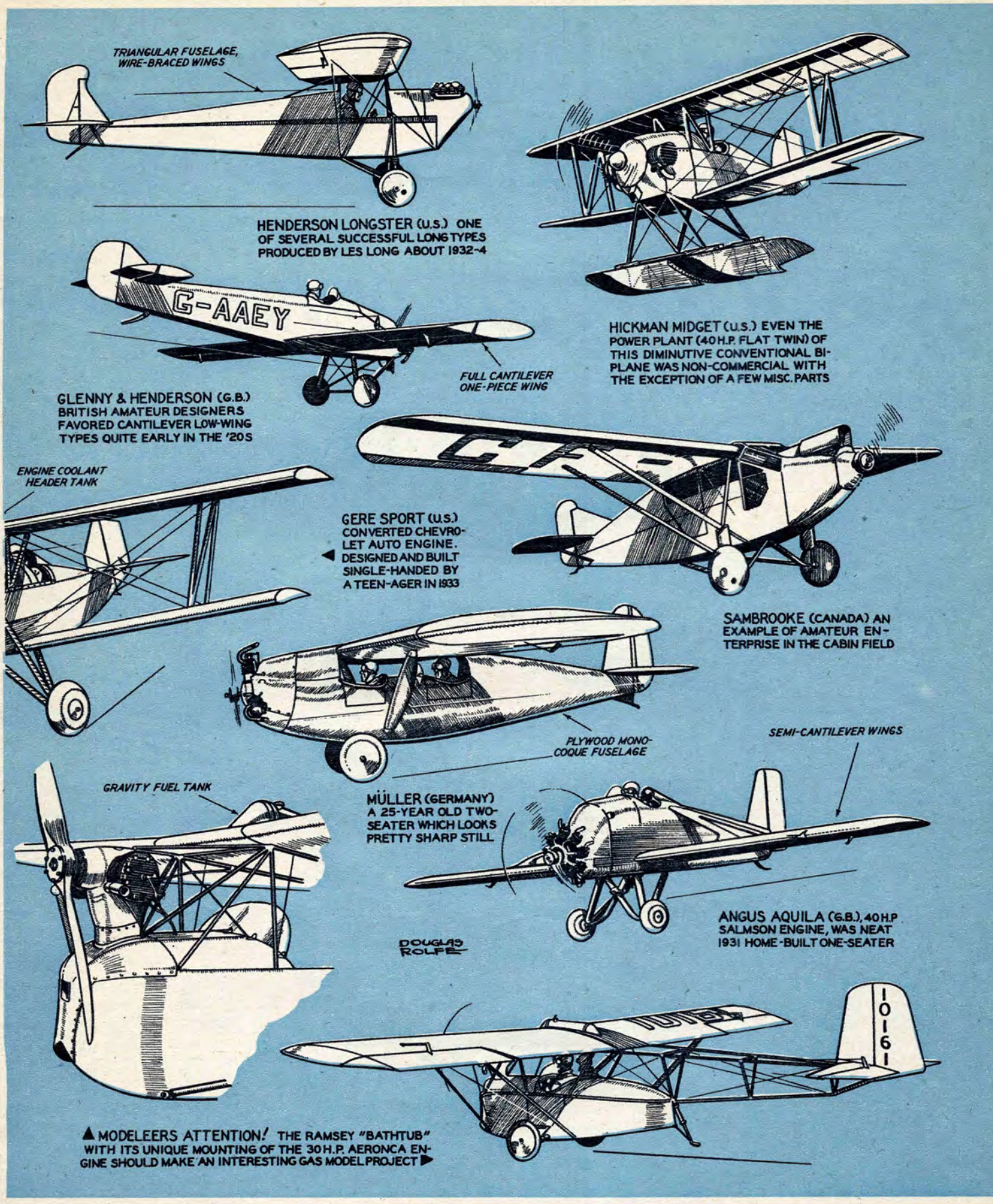
EPPS MONOPLANE (U.S.) BEEFED-UP INDIAN CHIEF MOTORCYCLE ENG. WEIGHT EMPTY WAS 340 POUNDS

POWELL RACER (U.S.) 30 H.P. BRISTOL CHERUB ENGINE.— A FURTHER EXAMPLE OF SCALED DOWN CONVENTIONAL DESIGN

PIETENPOL SKY SCOUT (U.S.) SMALLER SISTER ▲ OF THE HIGHLY SUCCESSFUL PIETENPOL AIR CAMPER, IT FLEW WELL WITH A CONVERTED FORD MODEL 'T' ENG.

GEORGIAS SPECIAL (U.S.) 28 H.P. CONVERTED LAWRENCE HORIZONTALLY OPPOSED ENGINE. VINTAGE '34 ▶

The first successful airplanes in the world, strictly speaking, were home-built jobs. It was not until the airplane developed into a more or less practical flying machine that the factory-built product entered the picture and soon predominated. However, shortly after World War 1 there was a great revival of the purely home-made or backyard airplane. This was due in part to the extraordinary success of the British Lympne light airplane trials and the attendant publicity, and in part to the post World War 1 German experiments (born of peace treaty limitations) with private development of low-powered planes. The backyard era we pay tribute to here, encompasses the period from 1921 to


TRIANGULAR FUSELAGE, WIRE-BRACED WINGS
HENDERSON LONGSTER (U.S.) ONE OF SEVERAL SUCCESSFUL LONG TYPES PRODUCED BY LES LONG ABOUT 1932-4
G-AAEY
FULL CANTILEVER ONE-PIECE WING
HICKMAN MIDGET (U.S.) EVEN THE POWER PLANT (40 H.P. FLAT TWIN) OF THIS DIMINUTIVE CONVENTIONAL BI-PLANE WAS NON-COMMERCIAL WITH THE EXCEPTION OF A FEW MISC. PARTS
GLENNY & HENDERSON (G.B.) BRITISH AMATEUR DESIGNERS FAVORED CANTILEVER LOW-WING TYPES QUITE EARLY IN THE '20S
ENGINE COOLANT HEADER TANK
GERE SPORT (U.S.) CONVERTED CHEVROLET AUTO ENGINE. DESIGNED AND BUILT SINGLE-HANDED BY A TEEN-AGER IN 1933
SAMBROOKE (CANADA) AN EXAMPLE OF AMATEUR ENTERPRISE IN THE CABIN FIELD
PLYWOOD MONOCOQUE FUSELAGE
SEMI-CANTILEVER WINGS
GRAVITY FUEL TANK
MÜLLER (GERMANY) A 25-YEAR OLD TWO-SEATER WHICH LOOKS PRETTY SHARP STILL
ANGUS AQUILA (G.B.), 40 H.P. SALMSON ENGINE, WAS NEAT 1931 HOME-BUILT ONE-SEATER
DOUGLAS ROLFE
JUPITER
1016
▲ MODELEERS ATTENTION! THE RAMSEY "BATHTUB" WITH ITS UNIQUE MOUNTING OF THE 30 H.P. AERONCA ENGINE SHOULD MAKE AN INTERESTING GAS MODEL PROJECT ▶

roughly 1934, when the introduction of strict government regulations drastically curtailed "production" of home-builts. The planes shown on these pages represent merely a few of the non-factory jobs constructed during this time. Most of the models portrayed are of U.S. origin, with a sprinkling of foreign designs thrown in to afford some comparison of the differing approaches to the same problem. It will be noted that most of the early backyard planes were little more than scaled-down versions of contemporary designs. The Snyder-MacReady and the Powell biplanes are two cases in point. As the years rolled by considerable originality and ingenuity became apparent, as in the Ramsey Bathtub and Angus Aquila.

TESTOR CHEMICAL COMPANY

Proudly

REVOLUTIONARY NEW PRE-

TESTORS

Fl

INDIVIDUALLY PACKAGED IN COLORFUL BOX . . . COMPLETE WITH EASY ASSEMBLY AND FLYING INSTRUCTIONS.

- Wingspan — 16
- Overall length -

Now! A fresh, new departure fro
Look at the unmatched featu es: s
hi-thrust, wide-blade plastic prope
design appeal . . . far-superior flyi
Testors "Flash" *exactly* what you h
hobby shop . . .

TESTOR CHEMICAL COMPANY (WOODW

Air Trails HOBBIES For Young Men

ly Announces
RE-FAB FLYING SENSATION!

Flash

pan — 16"
ll length — 13"

79¢

arture from previous ideas in prefabricated flying models! feature: swept wings like latest jets . . . specially designed stic propeller . . . unique integrated assembly . . . irresistible perior flying performance. Reasons a-plenty why you'll find hat you have been looking for! Available now at your favorite

(WOODWORKING DIVISION) **ROCKFORD, ILL.**

MAY, 1954

UNMATCHED FEATURES!

ALL NEW CONCEPT in assembly (patent applied for).

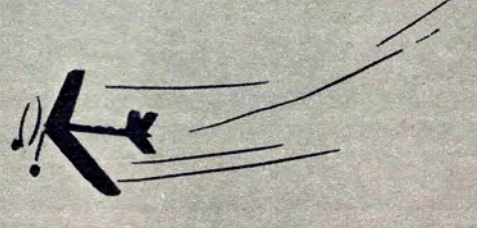
PLASTIC PROPELLER . . . latest wide-blade, hi-thrust, efficient type, specially designed for the "Flash".

POLYSTYRENE PLASTIC front fuselage unit and wheels in bright red . . . virtually unbreakable.

GENUINE T-56® RUBBER . . . contest quality! No compromises in making "Flash" the very best!

TESTORS QUALITY BALSA . . . velvet-smooth, uniform, the grade you expect from Testors. Colorfully printed in bright red; cleanly die-cut.

REAL PERFORMANCE! A rare combination of looks and eye-opening flying ability. Fast and stable, "Flash" emulates latest swept-wing jets.



It Waddles across the Ground, It Skims along the Water

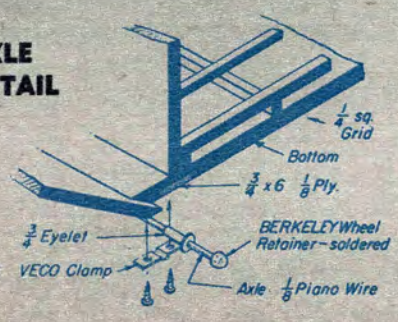
It's the: **REMOTE-RADIO CONTROLLED**

WHATIZZIT!

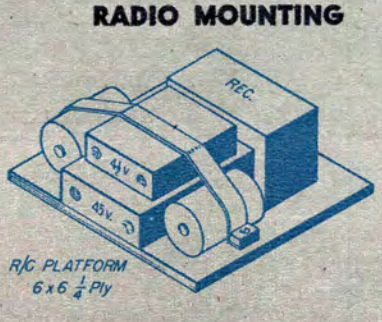
■ Operate this one after dark and with no fear of crashing! Lights are optional, hook up to blink with rudder. "Horns" are safety measures for congested areas. Larger powerplants should have two-speed for slow turns. Position radio to maintain even water line (it can be higher).

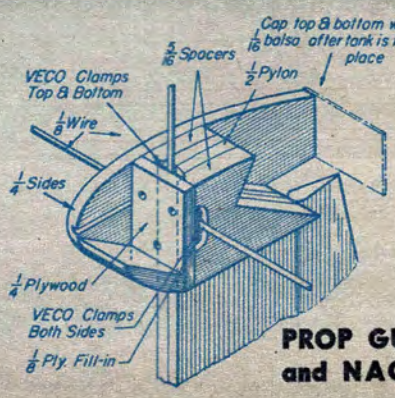
Building sequence: cut sides, add triangles; cut two 4" x 6" bulkheads; make bottom, butt stock to width; sides cement alongside bottom; glue bulkheads; add stationary deck under prop; sand transom angle; add top, bottom front decking; sand bow square; add radiator; laminate pylon, position; transom is 2 pieces, each side of pylon; firewall; propguards; 5/16" cowl spacers on pylon; cowl side, ¼" sheet; lower cowl front; tank; finish nacelle with 1/16" sheet; front axle; rudder; rear axle; floorboards; seat—removable hatch, 1 unit; dashboard; switches; fenders—bolt through block; windshield; Duco auto filler; sand; O. D. dope; fuel proof if glow plug; away you go!

AXLE DETAIL

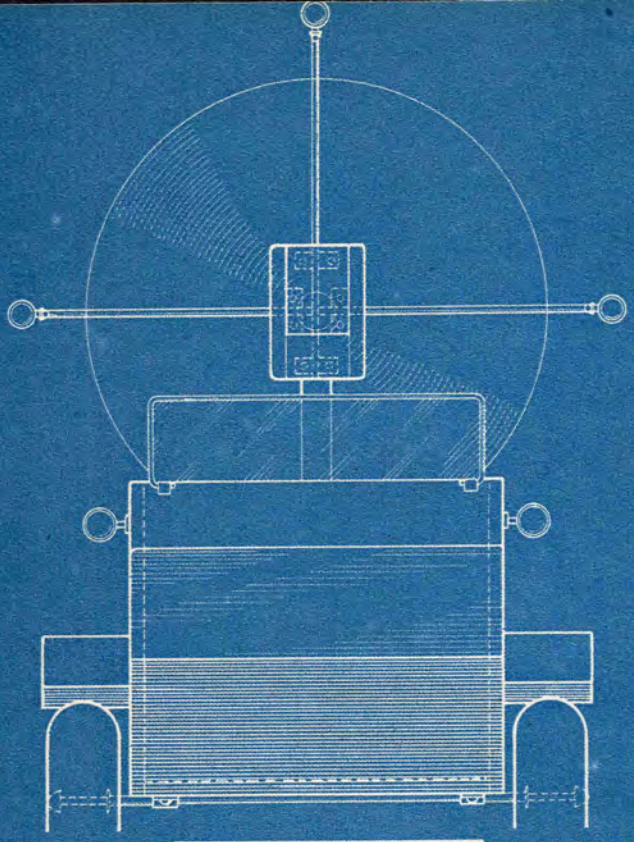


RADIO MOUNTING

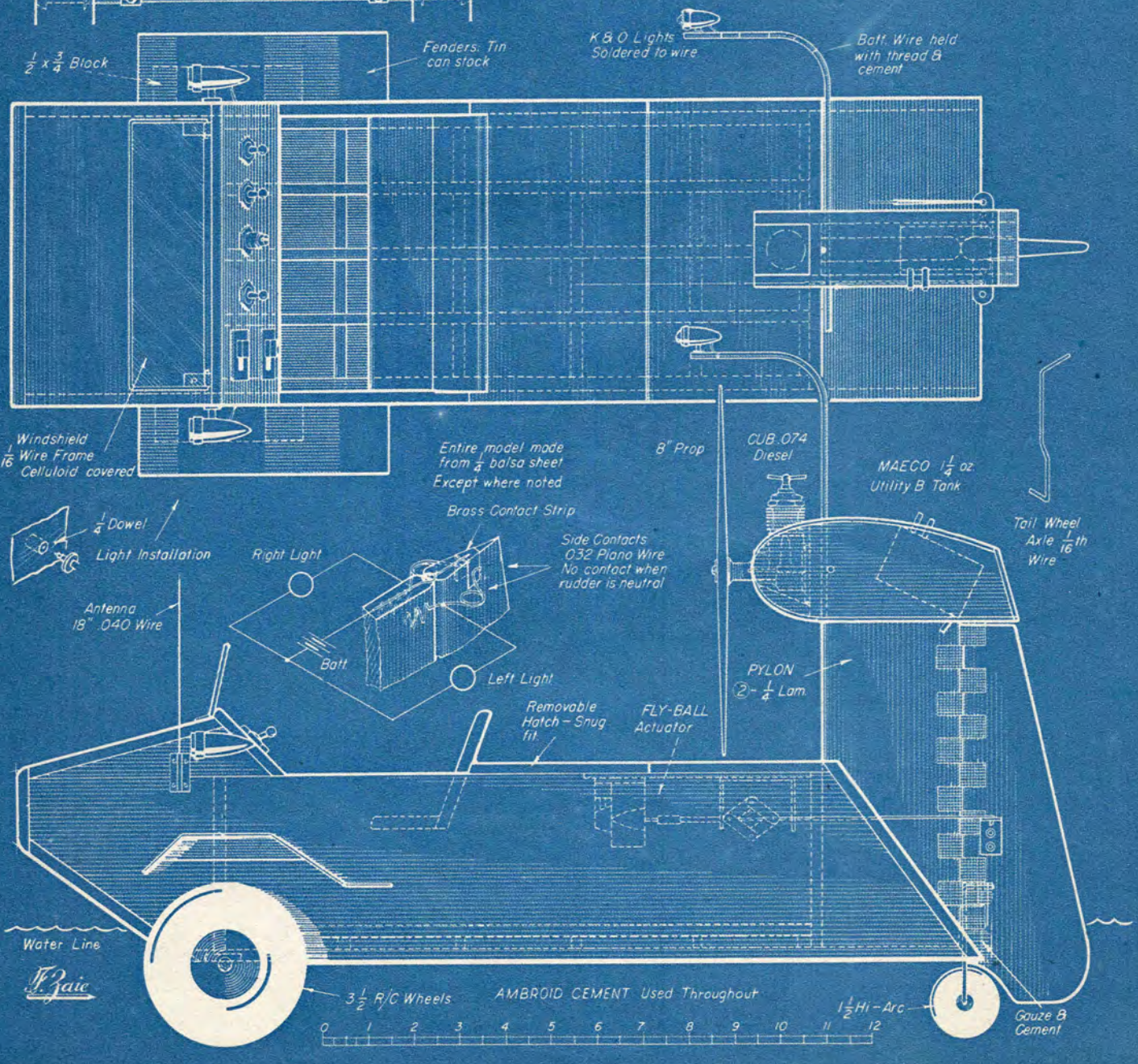


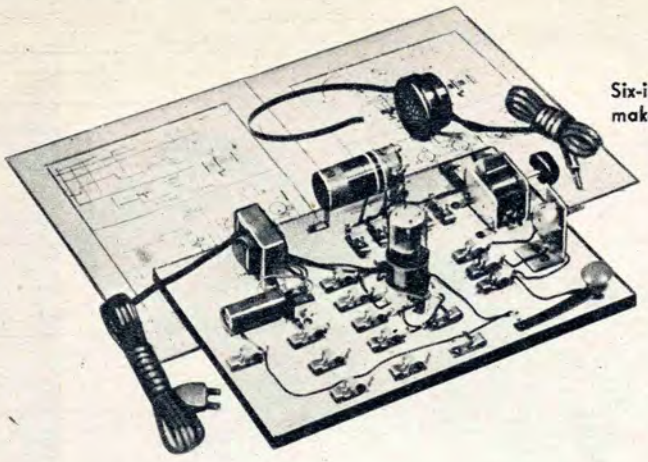


PROP GUARDS and NACELLE



Full-size plans for Whatizzit are part of Group 554 by Hobby Helpers, 770 Hunts Point Ave., New York 59, N. Y. (50c)


1/2 x 3/4 Block
Fenders: Tin can stock
K & O Lights Soldered to wire
Batt. Wire held with thread & cement
Windshield 1/16 Wire Frame Celluloid covered
Entire model made from 1/4 balsa sheet Except where noted
8" Prop
CUB .074 Diesel
MAECO 1 1/4 oz. Utility B Tank
1/4 Dowel
Light Installation
Brass Contact Strip
Right Light
Side Contacts .032 Piano Wire No contact when rudder is neutral
Tail Wheel Axle 1/16th Wire
Antenna 18" .040 Wire
Batt
Left Light
PYLON (2) - 1/4 Lam.
Removable Hatch - Snug fit
FLY-BALL Actuator
Water Line
3 1/2 R/C Wheels
AMBROID CEMENT Used Throughout
1 1/2 Hi-Arc
Gauze & Cement
0 1 2 3 4 5 6 7 8 9 10 11 12



Six-in-One radio "lab" sold by Allied Radio for $8.25; in turn makes 2-tube broadcast receiver or five special type circuits.

KITTING YOUR WAY TO A Career in Radio

■ Your own standard band AM (amplitude modulated) broadcast receiver for $3 complete! Yes, you *can* get a kit for a radio receiver that will provide clear radio reception for this amount. There is no upkeep cost, no tubes or batteries to replace, and if you take reasonable care of it, it should last a lifetime. What's the catch? None at all, but you do have to understand what you are getting. For your $3, you will receive a crystal receiver kit, which can be assembled in a few moments. It will give you good listening without distortion.

These are the good points, but there are some drawbacks, too. Unless there are one or more fairly powerful broadcast stations near you (within about five miles or less) chances are you will need a long, high outdoor antenna, and a good solid ground connection, to get good results. Some receivers are not selective enough to separate two or more strong transmitters located fairly near each other on the broadcast band.

Most of the lowest price kits and finished crystal receivers are sold with only a single headphone; a *pair* of phones is much better. Double headphones will shut out external noise; they actually make it seem as though you are getting a louder signal.

If you live way out in the country, an antenna a hundred feet or more long might be necessary. It should be fairly high (from the peak of a house to a barn or garage will do nicely), and may be made of any size wire; heavy wire is best simply because it will stand wind, ice and snow without breaking. The "ground" may be made by attaching a wire to a water pipe, gas pipe, or radiator.

If you are located within a mile or so from a station, your crystal receiver will probably pull in the signals with a makeshift antenna. It is often possible to get fair reception by use of bedsprings. Try any large metallic area, such as window screens, metal door or window frames. Such "antennas" are especially useful if you carry the receiver at camp or while travelling, and can't install an outside antenna at every stop.

The next step is receivers which are tuned by means of a variable condenser. Kits for these cost a little more, are much easier to tune, and usually are more selective. Such a set will cost about $3.50, including a single headphone.

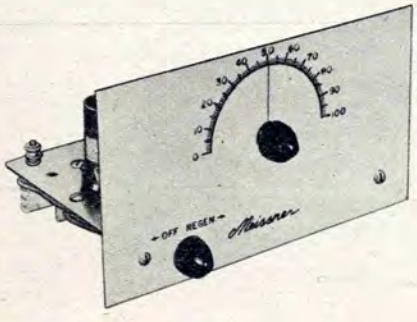
There is one point that should be kept in mind, if you use a crystal receiver. Atmospheric disturbances, such as lightning—even if it is some distance away—can ruin the crystal, so it is wise always to disconnect the antenna from the receiver when you are not using it. It is

(*Continued on page* 92)

LOW-COST RECEIVERS (Both Kit and Non-Kit Types)

MAKER	TYPE	PRICE	TUBES	POWER	BANDS	NOTES
A & A Electronics 423 Broadway Brooklyn 11, N.Y.	X	$2.50	N	none	BC	Sliding contact tuner
	1-T	5.95	1	A Batt.	BC	No. B batt. no soldering
Air Champ 178 Suffolk St. N. Y. C. 2	X	3.00	N	None	BC	Sliding tuner; adj. crystal
	X	6.95	N	None	BC	Condenser tuned; fixed crystal
	1-T	7.95	1	Batts.	BC	Short wave adapter available
	2-T	12.95	2	Batts.	BC	Has speaker
Allied Radio 100 N. Western Ave. Chicago 80	Knight X	2.95*	N	None	BC	Condenser tuned; fixed crystal
	B DX-er	11.95*	2	Batts.	BC-SW	Has plug-in coils
	Ocean Hopper	12.75*	3	AC-DC	BC	SW coils extra
	6-in-1	8.25*	One (2 section)	AC6DC	BC	See photo
Boy Scouts of America	SW Explorer	13.95	2	Batts.	BC-SW	Plug-in coils
Supply Service 2 Park Ave. N. Y. C. 16	X	2.95	N	None	BC	Includes antenna
	1-T	6.50	1	Batts.	BC	
	2-T	10.75	2	Batts.	BC	Loud speaker
Jaeger & Co. Skokie, Ill.	Tubeless	9.95	N	None	BC	Condenser tuned; fixed crystal; ant., double phones
Thordarson-Meissner Mt. Carmel, Ill.	Batt. Trainer	10.65*	2	Batts.	BC	SW coils available
	AC-DC Trainer	12.25*	3	AC-DC	BC	SW Coils available
Midway Co. Kearney, Neb.	Packette †	4.99	N	None	BC	Very small; built-in phone
	Tinymite†	4.99	N	None	BC	Very small; external phone
Philmore, N. Y. C. 3	Little Wonder†	1.04*	N	None	BC	No phone included; not a kit
	Supertone†	1.35	N	None	BC	Not a kit; fixed crystal
	Selective	3.00	N	None	BC	Cond. tuned; fixed crystal
	AC-DC	7.50	2	AC-DC	BC	Tubes extra
	2-Band	11.95	3	AC-DC	BC-SW	Has speaker; tubes extra
Precision Electronic Lab. Placerville, Calif.	D/M Pocket	5.99*	1	Batts.	BC	Very small; phone not included
Radio Shack Boston 8, Mass.	Peanut Tube	2.98*	1	Batts.	BC	Tube included; very compact;
	Transistor	15.75*	2 Transistors	B Batt. only	BC	Transitors; no phone incl.

X—crystal; T—tube; 1-T means "one tuber", etc.; N—none; BC—standard A.M. broadcast band; SW—short wave band; phone—headphone Batt. or Batts.—batteries. *—Phone not included; †—Finished unit, ready to use; None of tube sets include batteries



Thordarson-Meissner offers battery or AC-DC kits, 2 or 3 tubes, respectively. Short wave coils available at additional charge.

Philmore's AC-DC kit has 2 tubes, one a rectifier (power tube). This set costs $7.50, (tubes extra), works quite creditably.

An example of how little is required to start: Air Champ's $3 crystal kit which tunes by means of sliding contact.

SCIENTIFIC ANNOUNCES THE

Exciting New

NORTH AMERICAN

F-82 TWIN MUSTANG

A DESIGNER'S (and modeler's) *Dream* COME - TO - LIFE

The fabulous F-82 . . . first time as a control-line, fly-it-yourself scale model. It was 8 months in perfecting (on the drawing board and in test flights). NOW — you can own it! It's SLEEK . . . and TRIM . . . and — well, you be the judge. Picture yourself at the control lines of this baby. It flies like a dream. And it's a downright cinch to assemble (we've super-pre-fabricated all the parts). There's two (2) carved balsa fuselages! Airfoil shaped balsa wing! Two (2) formed plastic canopies! Two (2) pilots! Two (2) metal cowlings, 2 formed landing gears, die-cut balsa tail assembly . . . to mention but a few of the outstanding features. We tip our hat to Mr. Musciano for his excellent job. We're sure you will, too, once you've seen it . . . built it . . . and flown it!

$2.95

18" WINGSPAN
For Small Bore Engines (.035 to .074)

POWER WITH
1 or 2
GAS ENGINES
TEST FLIGHTS PROVE THIS!

Same model pictured as night fighter-interceptor

WALTER A. MUSCIANO
World Famous model airplane authority . . . designer of this model.

BE SPECIFIC SAY— **SCIENTIFIC**

SCIENTIFIC MODEL AIRPLANE CO.,
113 A 5 Monroe St., Newark 5, N. J.

If no dealer is available, add 10c (postage & packing)

More Exciting Scientific Models
SEE NEXT PAGES

SEE THE FABULOUS F-82 AT YOUR DEALERS . . . SOON!

NEW!

PITT'S SPECIAL
LITTLE STINKER

SCOOP! Here's Betty Skelton's championship stunt flyer . . . never before at this low, low price. It's one of the snappiest, most colorful stunt flyers that ever took to the air. The completely prefabricated kit features: carved balsa fuselage, all the colorful decals, formd balsa wing, plastic pilot, Jim Walker's U-Control, etc., etc. — everything cut, formed or shaped for easy assembly. **2.50**

POWER WITH ANY SMALL BORE ENGINE (.020 TO .074)

SCIENTIFIC MODEL AIRPLANE COMPANY, 113 A5 MONROE STREET, NEWARK 5, NEW JERSEY

AMERICAN BOY
STUNT TRAINER
18" WINGSPAN FOR .020 TO .074 ENGINES

Here's our new, popular U-Control trainer . . . the biggest dollar's worth of model airplane in the whole wide world. It's a 100% complete — 100% prefabbed. BEGINNERS . . . Assemble it in "nothing flat," add your engine — and away you go! EXPERTS . . . you'll love this inexpensive profile job for your experimental work — for testing new flying techniques. **1.00**

NORTH AMERICAN
TEXAN AT6
18" WINGSPAN FOR .035 TO .074 ENGINES

An AIR TRAILS "Blue Ribbon" award model. It's our authentic scale replica of the world famous U. S. Air Force AT6 Trainer. The Navy calls it their "SNJ". Modelers everywhere call this exciting control-liner a real "thriller." The completely prefabricated kit includes: Jim Walker's U-Control, carved balsa fuselage, formed wing, cowling, etc. **1.95**

FREE Scientific Catalog . . . Contains all our exciting action models: Airplanes, Speedboats, Race Cars, Etc.

BOEING F4B-4 $2.95
SPAN: 17½" For .020 to .074 Eng. Deluxe U-Control model. 100% complete—100% prefabbed . . . with carved balsa fuselage, metal cowl, rubber wheels, pilot, etc.

LITTLE MERCURY $1.50
SPAN: 18" For .039 to .074 Eng. Carved fuselage model — at this sensational low price. It's completely prefabbed . . . easy to assemble, easy to fly. Jim Walker's U-Control.

CURTISS HAWK $2.95
SPAN: 17½" For .020 to .074 Eng. Deluxe U-Control model of the U.S. Army's famous "Hawk" fighter. 100% complete . . . 100% prefabbed. Contains carved balsa fuselage, etc., etc.

WACO CABIN $1.50
For .020 to .049 Engines
Imagine! This carved fuselage biplane "beauty" for only $1.50. It's semi-scale. Features Jim Walker's U-Control, all prefabricated parts.

LITTLE MUSTANG $1.95
SPAN: 18" For .020 to .074 Eng
Famous escort fighter model. Completely prefabbed. Features carved balsa fuselage, formed balsa wing, etc., etc.

LITTLE DEVIL **$1.50**
SPAN: 18" For .020 to .074 Eng.
An economically priced U-Control model. Easy to build and fun to fly. Prefabbed parts include: carved balsa fuselage & wing, etc.

BUCKEYE JR. **$3.95**
LENGTH: 14" For .020 to .074 Eng.
Full speed ahead for thrills with this "beaut" of a speedboat. Prefabbed model is 100% complete—carved balsa hull, brass fittings.

RIVIERA **$3.50**
For "½ A" Eng., Electric Motors
Authentic Chris-Craft replica with a 12" carved balsa hull and brass metal fittings. All parts finished. Completely prefabbed model.

SEA HAWK **$2.50**
"½ A" Eng., CO_2, or Elec. Motors
Features our exclusive aeronautical fin and rudder design. Prefabbed model has a 12" carved balsa hull, brass metal fittings, etc.

BEL AIR **$2.95**
SPAN: 18" For .039 to .099 Eng.
Deluxe speed, sport & stunt flyer. Features carved balsa fuselage, formed hollow balsa wing, etc., etc. — all satin smooth finished. U-Control.

MONOCOUPE

18" WINGSPAN FOR .035 TO .074 ENGINES

Every beginner will love our scale model of America's favorite private plane. It's so easy to build . . . easy to fly! The prefab kit includes: carved balsa fuselage, formed metal cowling, Jim Walker's U-Control, etc., **1.50**

BOEING P-26A

18" WINGSPAN FOR .020 TO .074 ENGINES

Our popular P-26A . . . in honor of the U.S.A.F.'s first all metal pursuit plane. This highly colorful model brings to life all the beauty of the prototype. It's a terrific control-line stunt or sport flyer. The super-smooth prefab kit contains a carved balsa fuselage, formed metal drag ring, etc., etc. **2.95**

MODELERS:
SEE THESE SCIENTIFIC MODELS AT YOUR FAVORITE HOBBY SHOP

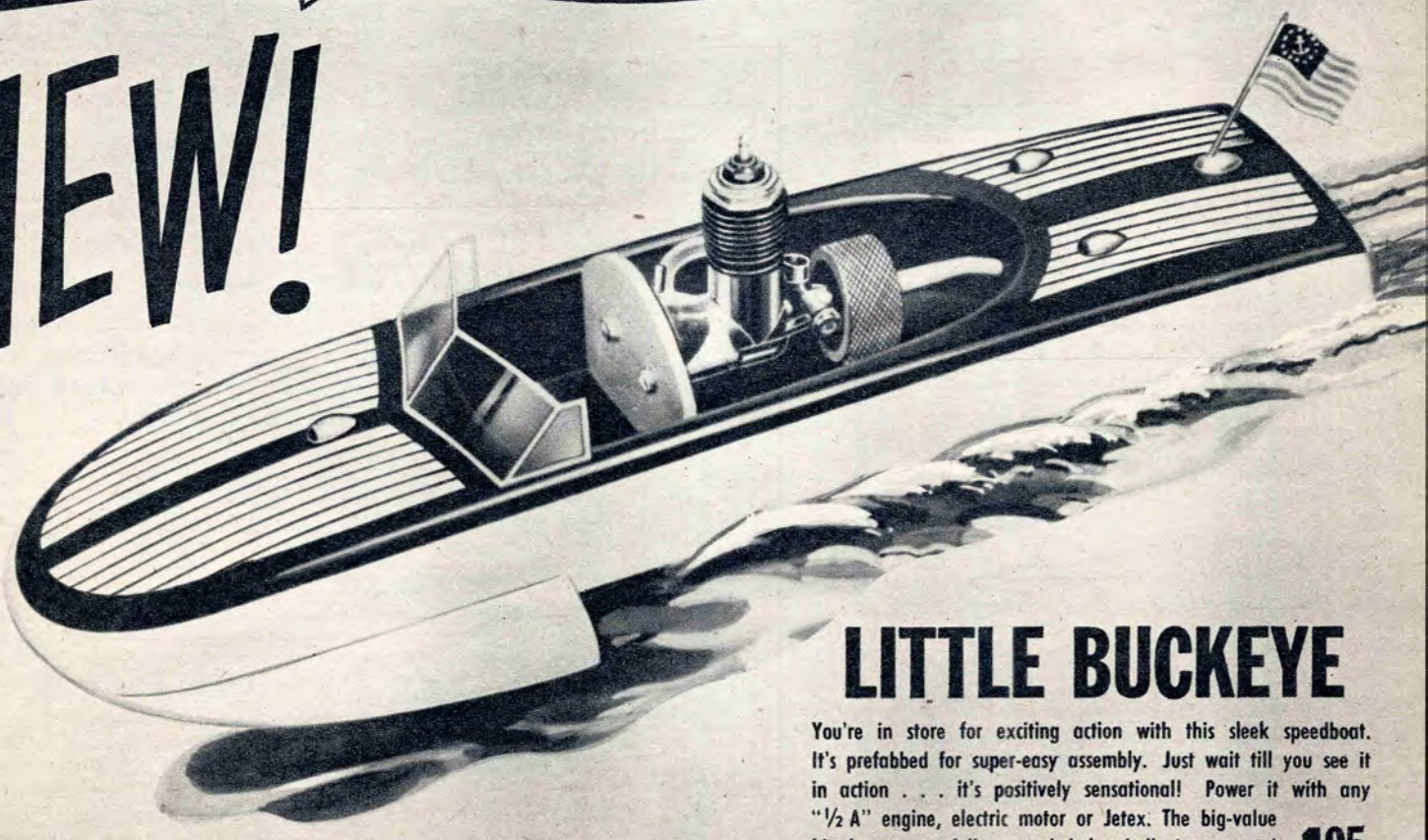
If no dealer is available, add 10¢ (postage & packing) to cost of model

BE SPECIFIC SAY—

SCIENTIFIC

Mr. Stanley Ziemba, Jewett City, Conn., sent us this photo of his Scientific P-26A. Stan says: ". . . It's a beaut and flies like a dream."

NEW!



LITTLE BUCKEYE

You're in store for exciting action with this sleek speedboat. It's prefabbed for super-easy assembly. Just wait till you see it in action . . . it's positively sensational! Power it with any "½ A" engine, electric motor or Jetex. The big-value kit features a fully carved balsa hull, brass metal fittings, etc., etc. **1.95**

GYRO
The Most Progressive & Reliable
RADIO CONTROL SUPPLIER

NEW BOOK, "Basics of Radio Control" ....$ .35
NEW! Complete LORENZ RECEIVER KIT with RK-61, Hard Tube 2nd Stage, 10,000 ohm Relay & diagrams. Nothing else to buy..... 9.65
NEW! RELAY SPARK SUPPRESSOR KIT, improves receiver operation..... .35
NEW! Powerful TRANSMITTER KIT, The Gyro Director. Famous circuit, almost 5 Watts. Nothing else to buy. With diagrams & instructions. Brand new cabinet, antenna, keying switch, tube, crystal & all parts.....only 12.95
New! FIELD STRENGTH METER KIT, checks your transmitter signal. Use any meter up to 5 Ma. All parts & diagram, less meter..... 1.35
New! ACCURATE 2" DUAL RANGE MILLIAMMETER, 0-5 & 0-50 Ma. with switch..... 3.85
R/C COMBINATION TESTER; 5 Ranges: 5 Ma, 50 Ma, 5 V, 50 V, 250 V. **NOT A KIT**..... 8.95
Brand New 2 V. VIBRATOR TRANSFORMER, used in PE157. Output 180-135V. @ 35 Ma. 3.50
NEW! STOP WASTING MONEY on dry batteries for your transmitter. Add our **2-VOLT VIBRATOR SUPPLY** to any transmitter; output 135 to 180 V. Kit: **$6.95**.....assembled 10.95
NEW BEEP BOX. Fits in palm of hand! Rotary type works with any transmitter & self-neutralizing escapement. **NOT A KIT**..... 1.95

Low Cost PROPORTIONAL CONTROL *added to any Transmitter & Receiver. Works with any Actuator.*
COMPLETE KIT of parts & diagrams for TRANSMITTER PULSER, incl. battery & case..... 6.95
ACTUATOR KIT for Receiver—no rubber bands or escapement needed..... only 2.15

ADAMS ACTUATOR . . . not a kit..... 6.45
PE 157 SUPPLY for Mac II Transmitter..... 11.95
LORD SHOCKMOUNT ..... .15
SIGMA 4F RELAYS, 8000 ohms **$4.50**; 3 for 2,000, 3,000 or 10,000 ohms..... 5.50
SIGMA 41FS, Sensitive 10,000 ohms—SPDT.... 1.45
OSR type Quench coils for hard tube sets..... 1.65
WHIP ANTENNA, 3 sections, 9½ ft..... 2.25
Antenna with base mount..... 2.75
FLEA CLIPS.....4 for 10c, **DISC MAGNET** for proportional control, 1 1/16" diam..... .95
DIAGRAMS: Transmitter or Receiver.....ea. .25

License-Free R/C TRANSMITTERS—27.255 Mc.
With Built In Gyro Magic Easy Tuning Indicator
Powerful 5 watt, 2 tube MAC II circuit. Available in following models—incl. antenna, meter & keying switch—ready to operate. FULLY GUARANTEED.
MODEL X1 in attractive case with built-in storage battery, vibrator supply & charger 37.50
MODEL X2, with 6 volt Dynamotor for car use 29.95
MODEL X3. Btry. operated transmitter using powerful 1-tube circuit for low btry. drain 23.95

MODEL X, MAC II, 2-tube Transmitter Unit, as used in above transmittters. Only 3"x4" x 1½", wired and tested. Complete, install in your case with tubes & crystal..... 15.50
ABOVE unit in kit form, complete..... 10.95
MAC II TRANSMITTER UNIT KIT, parts to build in PE157 Case. Includes tubes, 27.255 Mc. Crystal, switches, tuning condensers, resistors, capacitors, wire, solder, diagram.... 12.95

RADIO CONTROL RECEIVER KITS 27¼ Mc
NOTE: All GYRO kits are guaranteed complete deluxe types with diagrams—nothing else to buy!
LORENZ 2 TUBE with 2 potentiometers, original design 3.35
Complete with **2 Gas Tubes & SIGMA 4F Relay** 14.15
MINI-MAC with Special **QUENCH COIL & Wound Coils** 4.25
Comete with **CK526 Tube and ED RELAY**.... 11.45
MILLER or **SIMPLE SINGLE** with **OSR** type **QUENCH COIL**..... 4.45
Complete with **Tube & SIGMA 4F** Relay; **MILLER, $9.95; SIMPLE SINGLE**..... 9.80
JOHNSON 3 Tube, including special **DUNCER** Choke Coil 4.75
Complete with **3 Tubes & SIGMA 4F 3000 Relay** 13.85
ABOVE KITS with drilled base & wound coils, add .50
ABOVE KITS wired & tested, ready to operate, add 5.00
TRANSMITTER & RECEIVER KIT..... 9.95
Parts and diagrams (less tubes & crystal) to build famous **MAC II Transmitter Unit** and **LORENZ RECEIVER,** with 10,000 ohm relay
PARTS FOR THE MINI-MAC Small quench coil 1.25
.05 Condenser .25 Padder Condenser .60
TUBES: CK526AX 1.95 CK506 ..... 1.45
RELAY-E.D. 5,000 ohm..... 6.50
ESCAPEMENTS BONNER MINI..... 6.95
SUPER AEROTROL.....3.95 ED MARK III.... 5.95
BONNER COMPOUND, makes 1 channel duplicate 3 channel control..... 14.95
CRYSTALS, 27.255 Mc Peterson Z9A..... 4.75
Crystal holder ..... .15

SAVE 10%—Deduct 10% from any of the kit prices when ordering with any escapement.

STORAGE BATTERIES
NTG, Mini., 6 volt, 2½"x1¾"x3½"..... 2.45
8BS4, 2 Volt, 3"x4"x5½"..... 2.75
STORAGE BTRY. CHARGER, 2 to 6 Volts, 6A, self regulating with charge indicator, special! 7.95
CHARGER FOR DRY BTRIES. Use 1 set of A & B's all season! Recharges all 1½ to 90 Volts 6.50
VIBRATORS, 6 Volt **$1.35**; 2 Volt Synchronous 1.00
METERS: Accurate, 2" sq., 0-500 Microamp.... 5.85
0-1 Ma.....**$3.65** 0-3 Ma.....**$2.95**
0-5 Ma..... **2.75** 0-50 Ma..... **2.65**
FLEAWEIGHT HOOKUP WIRE—25 Ft. (5 colors) .25
6 VOLT DYNAMOTORS, with Shockmount base, 250 Volts/65 ma..... 7.95
300 Volt/165 ma. **$9.50**; 180 Volt/100 ma. 7.95
SIGMA 4F RELAY COILS: Repair relays, 8,000 ohms **$1.25**; 2,000, 3,000 or 10,000 ohms 1.10
INSULATED SCREWDRIVER, for tuning adj..... .35
SOCKETS: mini, hearing aid, 4 or 5 pin..... .15
Mini 7 pin.....10c; Loktal or octal....25c for 2
PLUG & SOCKET, small 3 or 4 pins.....pair .15
5 or 8 pin.....pair .25
MICARTA or LINEN BASE Bakelite BOARDS for Receivers, specify size..... .25
SWITCHES: Toggle SPST.....25c; Slide switch .15
KEYING SWITCH, remote newmicro "click" type.. .55
KEYING SWITCH, normally closed "click" type .85
METER JACK, open circuit..... .25
Closed circuit.....30c; PLUG for jacks..... .35
MINI PLUG & JACK, for metering, etc..... .15
RESISTORS, small—most sizes..... .10
POTENTIOMETER, mini 10,000 or 25,000..... .40
POT., dime size, 10,000-25,000 ohms..... .85
POT, 4,000 ohms, fleaweight..... .25
CONDENSERS, Ceramic, most sizes..... .10
Hearing aid, paper or mica, most sizes..... .15
CERAMIC TRIMMERS, 3-30 mmf. or 7-45 mmf. .35
PADDER, For Simple Single or Mini Mac Sets .60
VARIABLE CONDENSER, air type, screwdriver shaft, .15, 25, 50 mmf..... .40
RECEIVER PLATE COIL, ETC, with adj. iron core .30
Wound for Lorenz, S. Single, Johnson, Mini Mac .55

New TUBES Guaranteed					
RK-61	$3.30	XFG-1	$3.20	3D6	$ .80
154	.90	1V5	1.90	3A5	1.35
155	.90	3A4	.95	3V4	1.05

Money Back Guarantee! FREE—With $8 order, INSULATED SCREWDRIVER; $12, or more, a "Radio Control Basics" Book or Voltmeter 0-3 V.; $15, or more, Sigma Relay 10,000 ohms. **Send for FREE Catalog A.**
Save C.O.D. fees, include postage, excess refunded.

GYRO ELECTRONICS CO.
325 Canal St., New York 13, N. Y.
Telephone: WOrth 6-1290

BLUE RIBBON MODEL

Air Trails HOBBIES
RADIO CONTROL

Control Master
27X and 27RH Equipment

■ Control Master's single hard tube receiver has a few tricks all its own. For one thing, it has no separate sensitivity control; there is only a single adjustment—that for tuning. Indirectly this sets the sensitivity as well.

The receiver is on a linen bakelite base, with four corner holes for attachment of hooks (if mounting is to be by rubber bands). Due to the high resistance relay, and rather high plate current, the relay can be adjusted with plenty of tension. In most installations, the set could doubtless be mounted on sponge rubber with entire satisfaction.

The 1S4 tube used may be had at most radio shops, since it is used in portable BC receivers.

CM's set comes with a 6" five-wire cord, terminating in a small five-prong plug. Also furnished are a socket for this plug, a test meter socket with two plugs, and two SPST slide switches for A battery and escapement circuits. For use with this receiver either a 3 or a 5 ma. meter will fill the bill; the latter is probably best.

Both transmitter and receiver are in finished form; replacement parts may be obtained. Xmtr is in a husky steel, black-crackle-finish case. This case is rather large, since the transmitter takes 180 V., which means four 45 V. batteries. There is plenty of room for them.

Xmtr circuit is the familiar tapped-coil type, tuning being accomplished with a screw-operated capacitor. This adjustment is at the rear of the chassis, not reachable from outside, unless a small hole is drilled in the rear cover (the batteries do not obstruct it).

Antenna coupling is the untuned type; the coupling coil is non-adjustable. For lower power, or close range work, the transmitter may be operated with only one or two antenna sections; for full output, three are used.

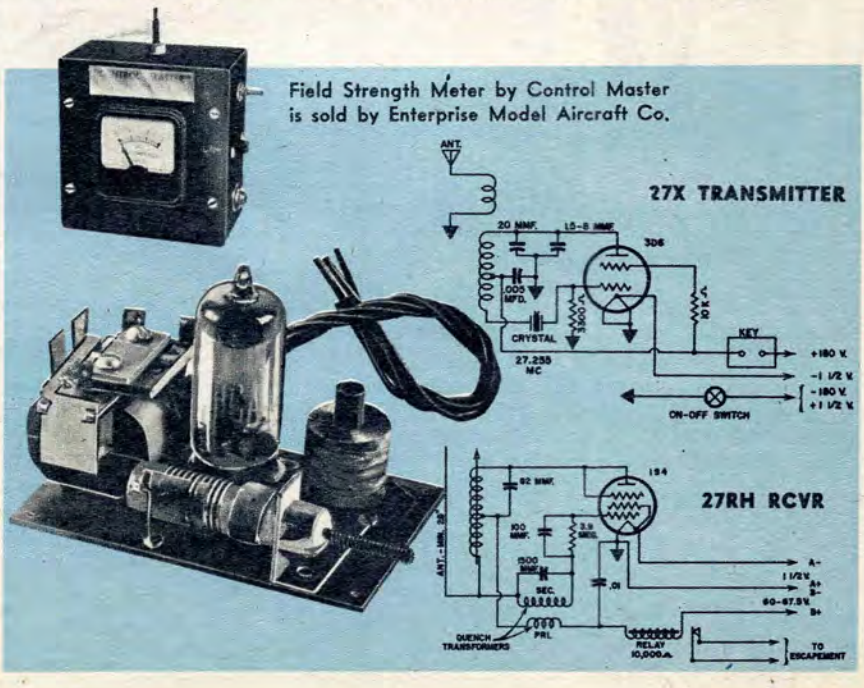
With the transmitter you get the tube, crystal, snap action key button with long cord, and the antenna.

TRANSMITTER: Type 27X. Case size, less top handle and protuberances—6" x 7" x 12" high. One slide switch for A circuit. Two-pin jack for attaching key lead or meter (both plate and screen grid current will be shown at this jack). Weight with all batteries installed—about 14 lbs. Antenna held on two screws by wing nuts: it is three-section type 8' 9" assembled; 3' long when taken apart; aluminum tubing.

BATTERY COMPLEMENT: One 1½ V. A cell (Eveready 742 or equiv.), current drain, 220 ma. B supply, four batteries (Eveready 482 and several other types and makes will fit); drain when properly tuned, 20-25 ma.

RECEIVER: Type 27RH. Single hard tube circuit, with a single control only. Size overall—2⅞" x 1⅞" x 2⅜" high, with tube in socket. Weight with tube, cord and plug—4 oz. Relay adjustments are made by bending parts. Suggested antenna length—30". Relay connections made through cord and plug. Relay is SPST type.

BATTERY REQUIREMENTS: A—1½ V. at 100 ma. (Can be two pencells in parallel). B voltage may be from 60-67½ V. At 67½ V., idling current is about 2.8 ma., dropping to 1.5 ma. with strong signal. Relay is set to operate at 2.1 ma. and open at 1.4 ma. Lightest possible suggested battery complement—two pencells and two 30 V batteries—4 oz. Heavier batteries strongly recommended, if model can carry them.



Modelers!

here's the GLAMOUR SUB MODEL to win *Air Trails' Photo Contest!*

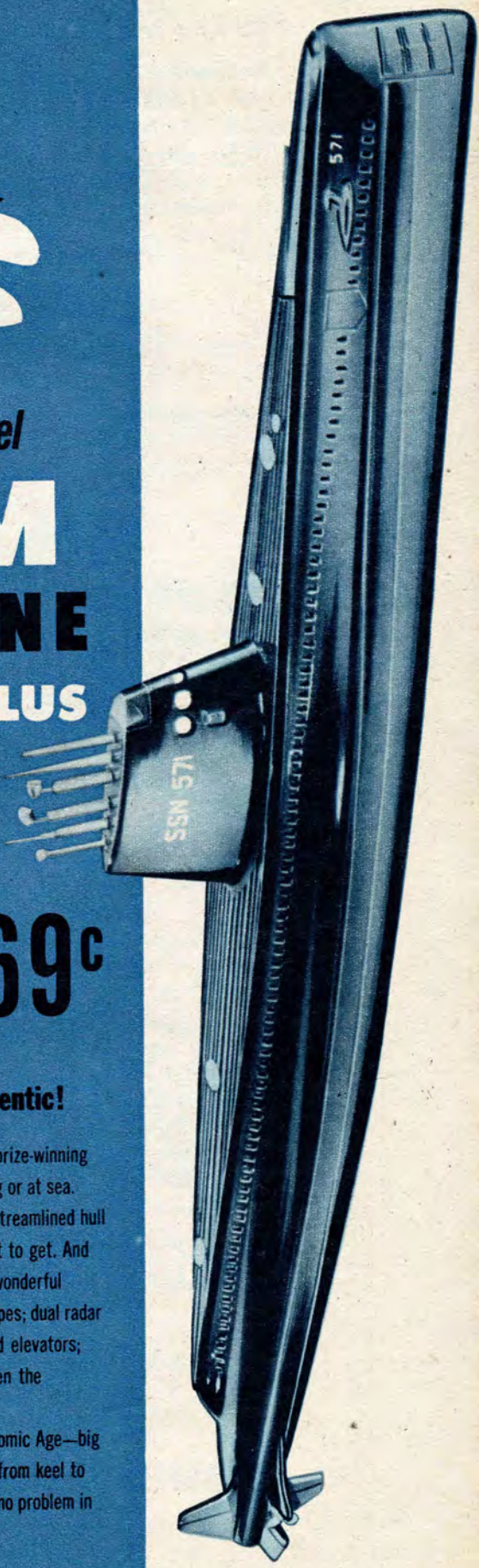
Authentic Scale Model

Revell's ATOM POWERED SUBMARINE

U. S. S. NAUTILUS

Start Shooting Today!
Buy and Assemble
Your Revell Atom Sub Model Now—

69c



It's Easy, It's Quick—It's Authentic!

Look, you "table top" photo fans! For a real prize-winning shot, just picture Revell's Nautilus at launching or at sea. That glossy blue plastic finish and beautifully streamlined hull inspire those dramatic "angle shots" you want to get. And Revell's Nautilus Hobby Kit includes all those wonderful precise details, too: snorkel and attack periscopes; dual radar and radio antenna; bow and stern rudders and elevators; indicated torpedo ports; twin screws, and even the non-slip grooved deck!

Here it is, fellows—the submarine of the Atomic Age—big enough; 13" long, 1½" beam; 3 13/16" tall from keel to periscope tip; and curvaceous enough to pose no problem in snapping award-winning shots!

A Revell *Authentic Kit*

Revell, Inc., 4223 OCEAN PARK AVENUE, VENICE, CALIFORNIA

THIS IS IT!

NEW! Authentic Scale Models — Completely Pre-Fabbed!

LUXURIOUS CHRIS-CRAFT 63' MOTOR YACHT
Kit B-11M Length 40" Beam 10¼"
For Class A, B & C gas engine(s) or electric motor(s)

FOR POWER OPERATION, SHELF MODEL, OR RADIO CONTROL

$18.95

Deluxe 108 pc. Scale Marine Fittings Set B-11F $7.50.

Actual photograph of model built from kit.

Chance-Vought CORSAIR F4U-1

U.S. NAVY CARRIER FIGHTER
Kit C-9 Span 36" Length 27¾"
For Class B & C engines

$5.95

NEW '54 CATALOG—WRITE NOW! Send 10c in coin to Dept. AT5

Sterling models
1530-34 N. Hancock St
Philadelphia 22, Pa.

SEE THESE OTHER STERLING MODELS

PLANES	Kit	Price
Monocoupe	C-1	$4.95
Howard Pete	C-2	5.95
Mr. Mulligan	C-3	4.95
Waco	C-4	5.95
Polish Fighter	C-5	5.95
SE 5	C-6	5.95
Ryan S-T	C-7	5.95
Fokker D-VII	C-8	5.95
Ring Master	S-1	2.95
F-51 Mustang	S-2	2.95
Yak-9	S-3	2.95
Space Master, Jr.	S-4	2.25
R. C. Piper Tri-Pacer	FS-1	10.95
POWER BOATS	**Kit**	**Price**
Richardson 27' Cruiser	B-1	$5.95
Higgins 17' Speedster	B-2	4.95
Chris-Craft 47' Buccaneer	B-3	7.95
Century Resorter '20'	B-4	3.25
Century Sea Maid '20'	B-5	2.95
Chris-Craft 32' Cruiser	B-6M	9.95
Deluxe 34-pc. scale marine fitting set for Kit B-6M	B-6F	3.50
Chris-Craft 50' Catalina	B-7M	11.95
Deluxe 66-pc. scale marine fitting set for Kit B-7M	B-7F	4.95
Century Sea Maid '20'	B-8M	7.95
Deluxe 35-pc. scale marine fitting set for Kit B-8M	B-8F	3.95
Higgins 26' Express Cruiser	B-9	3.95
Harco '40' Deluxe Cabin Cruiser	B-10M	10.95
Deluxe 64-pc. scale marine fitting set for Kit B-10M	B-10F	4.50

MARINE DRIVES	Price
½ A (⅛" dia.) Gas Marine Drive	$2.95
A (3/16" dia.) Gas Marine Drive	3.95
BC (¼" dia.) Gas Marine Drive	3.95
Electric Marine Drive	2.25

Marine Fittings Also Available *Individually*. Ask Your Dealer.

You Ask

DC-4 with Three Rudders . . . Please find enclosed a picture of a Douglas DC-4 with *three* rudders. Could you explain this? The picture was clipped from a very old Bill Barnes Air Trails mag about 1938 or '39. It is very odd because the present DC-4's have *one* rudder. Is this picture a phoney? I have read a lot and heard a great deal about the Northrop twin-boomed P-61 "Black Widow." Would you tell me where I may get pictures and possibly data on this plane?

A friend of mine has a picture of a twin-engine, single rudder plane that looks a little like the A-20 "Havoc," only it has JM-1 below it. It doesn't say anything else. Could I have a bit more info about the JM-1?

Dave Kimpton, Cobourg, Can.

• The picture of the DC-4 sent by you is correct. It shows the prototype which had three rudders, later eliminated on production job.

Suggest that you contact Northrop Aircraft Corp., 1001 E. Broadway, Hawthorne, Calif., for a photo of the P-61, or any of the picture services which advertise in the Classified Ad section of this magazine.

The JM-1 was a Navy version of the Martin B-26C Marauder.

XF-85 Parasite Fighter . . . I have become interested in the XF-85 parasite fighter since I saw it at an air show. Could you please tell me what company makes the XF-85 and their address so I could get some info?

Milton Balles, Chicago, Ill.

• The XF-85 was built by the McDonnell Aircraft Corp., St. Louis, Missouri. It was a purely experimental aircraft, with no production for it contemplated.

Surplus Gliders . . . I noticed in your latest issue of Air Trails you mention that one can purchase gliders from the government. I am in the market for a good used glider—but you didn't mention where to write for information on these gliders. Would you

DARWIN SHAKE-PROOF TANKS

See the complete line on display at all dealers. Tanks may be cemented into your plane, will not leak or the tubing shake loose.

Twenty eight different sizes from .14 oz. to 5.1 oz., 1-2 A to class D. Constructed completely of fuel proof brass.

PW Series	$ .50 ea.	L Series	$ 1.00 ea.
B Series	.75 ea.	M Series	1.00 ea.
S Series	1.00 ea.	A Series	1.00 ea.

Special No. 0 for Team Racing $ 1.00

DARWIN MODEL AIRCRAFT CO.
2430 TREMMEL AVE. ANN ARBOR, MICH.

See Dyna's 2 New Models

North American F-82 Twin Mustang **$3.50**
Grumman Cougar **2.75**

Jam-packed with metal castings, every little detail visible in the actual airplane—every single item that can be reproduced—is given to you.

F9F PANTHER $2.75

F-86 Sabrejet	$2.75	MiG-15	$2.75
F-84 Thunderjet	2.75	F-80 Shooting Star	2.75
British Spitfire	$2.75	P-51 Mustang	$2.75
FW-190 Focke Wulf	2.75	F6F Hellcat	2.75
P-40 Warhawk	2.75	F8F Bearcat	2.75
F4U Corsair	2.75	P-38 Lightning	3.50
ME-109 Messerschmitt	2.75	P-47 Thunderbolt	2.95

DYNA-MODEL PRODUCTS COMPANY
76 SOUTH STREET, OYSTER BAY, NEW YORK

CANADA'S LARGEST AND MOST COMPLETE HOBBY SUPPLIERS

CANADIAN DEALERS Let Us Be Your HOBBY HEADQUARTERS

Write for Catalogue

MODEL CRAFT HOBBIES LTD.
66 WELLINGTON ST., WEST
TORONTO, ONTARIO, CANADA

. . . we answer

please send me such address? I would also appreciate it if you could give me the address of the nearest CAA office as I would like to get in touch with them about a license for this glider.

Carl S. Whittle, Oklahoma City, Okla.

• No more surplus gliders are available from the government; they have all been sold. Suggest that you write to the Soaring Society of America, Box 71, Elmira, N. Y. for its list of used gliders. There is undoubtedly a CAA office either at your Municipal or the Wiley Post airport.

Requirements for Pilot License . . . I am 16 years old and I am interested in obtaining a pilot's license. What is the age for a flying license? How many flying hours does it take? Approximately how much would it cost for lessons and renting a plane?

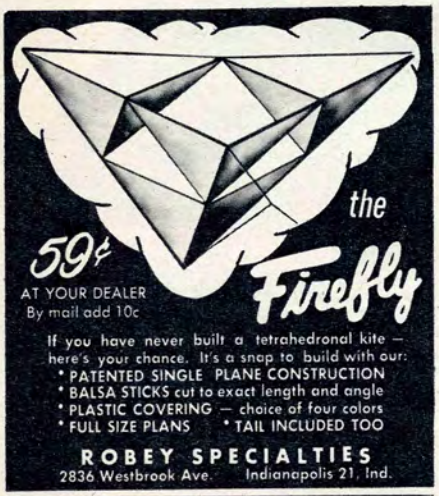
Arthur Geller, Jr., Verona, N. J.

• The minimum age for a Private Pilot's Certificate is 17—for commercial 18. For private pilot's license you must have a minimum of 15 hours of dual instruction or 25 hours of solo flight time which includes some cross country flying. Cost is approximately $11.00 per hour for dual time and $8.00 per hour for solo.

Jet Helicopters . . . When and where was the first jet helicopter? Can you supply all available information such as what firm or firms and designation? Are any jet helicopters in service or production now?

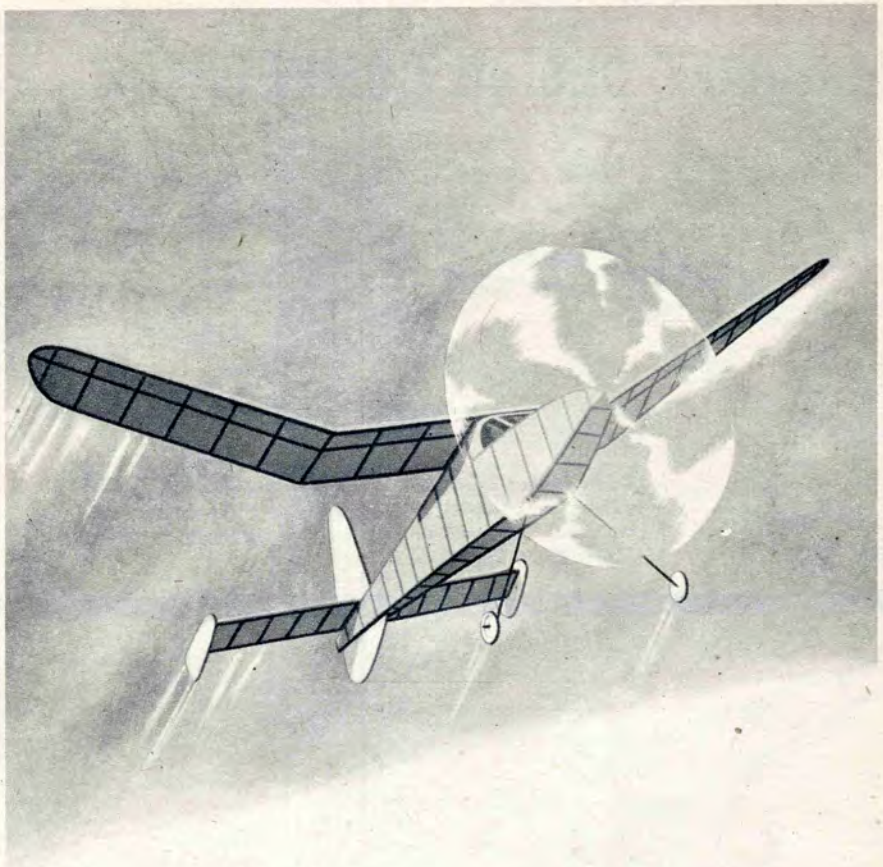
K. Ronald Rutt, Reinholds, Pa.

• We believe that "Little Henry," built by McDonnell Aircraft Corp., of St. Louis, Mo., was the first jet-propelled helicopter. Other manufacturers who build this type of craft are: Hiller Helicopters, Inc., Palo Alto, Calif. (Hiller Hornet) and the American Helicopter Co., Inc., Manhattan Beach, Calif., which manufactures the XH-26 "Jet Jeep."



If you have never built a tetrahedronal kite — here's your chance. It's a snap to build with our:
• PATENTED SINGLE PLANE CONSTRUCTION
• BALSA STICKS cut to exact length and angle
• PLASTIC COVERING — choice of four colors
• FULL SIZE PLANS • TAIL INCLUDED TOO
ROBEY SPECIALTIES
2836 Westbrook Ave. Indianapolis 21, Ind.

I used the NEW CLEVELAND MODEL Cement containing "STATISEAL" (TM) Miraculous Super-Grip Adhesive
At Better Hobby Shops Everywhere!
CLEVELAND MODEL PRODUCTS CO.
"SINCE 1919" CLEVELAND 2, OHIO



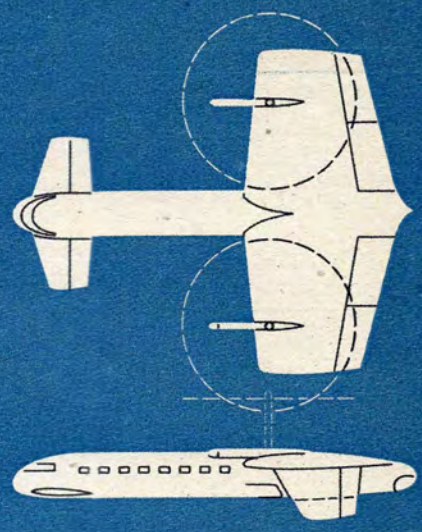
for **FUN**
or **FAME**...
fly low-cost
rubber-powered planes
wound with
T-56®

POWER OF CHAMPIONS

UNITED STATES RUBBER COMPANY
ROCKEFELLER CENTER • NEW YORK

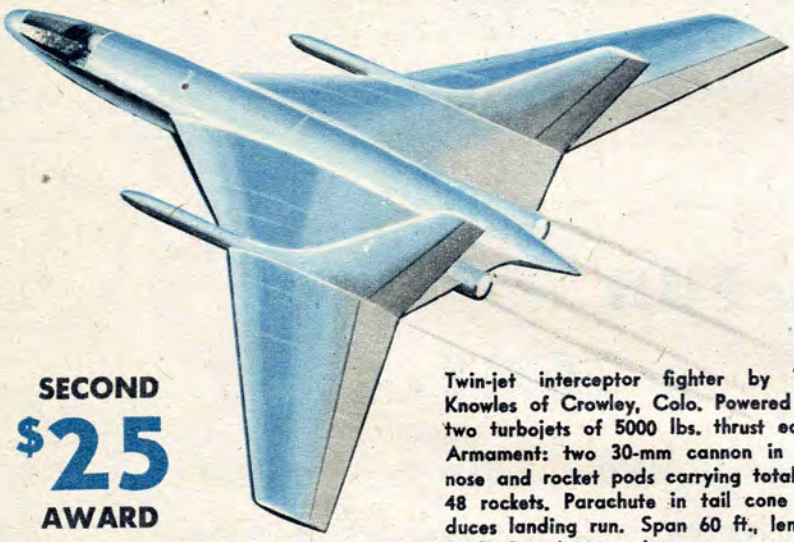
"ATH" AIRMEN OF VISION

AIRCRAFT DESIGN COMPETITION



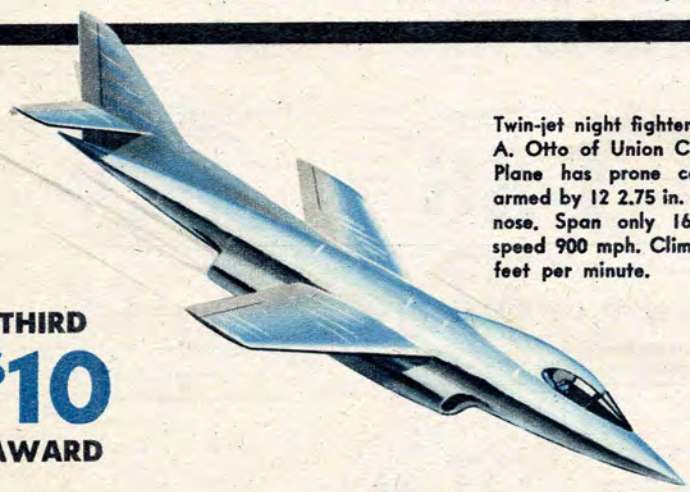
FIRST
$50
AWARD

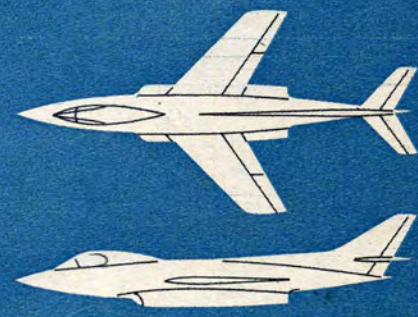
Convertiplane by Tommy Georges of Los Angeles, Calif. Carries 24, powered by jet engines which operate rotor-propellers. Shafts of props are raised vertically for helicopter flight. Span is 64 ft.



SECOND
$25
AWARD

Twin-jet interceptor fighter by Ted Knowles of Crowley, Colo. Powered by two turbojets of 5000 lbs. thrust each. Armament: two 30-mm cannon in the nose and rocket pods carrying total of 48 rockets. Parachute in tail cone reduces landing run. Span 60 ft., length 55 ft. Speed 800 mph.





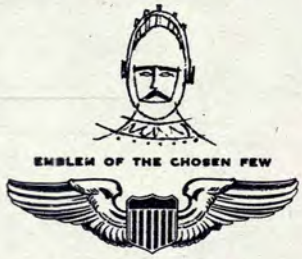
THIRD
$10
AWARD

Twin-jet night fighter by Louis A. Otto of Union City, N. J. Plane has prone cockpit, is armed by 12 2.75 in. rockets in nose. Span only 16 ft. Top speed 900 mph. Climb: 15,000 feet per minute.

Rules governing this "aircraft of the future" competition are as follows: Three-view sketches of the envisioned aircraft will be required. These should be not less than 8½ x 11 inches for the entire three views. Give sketches of the complete airplane or space craft in three-quarter front and rear positions. Photos of a model of the proposed design may be included. Information on the powerplant(s), estimated performance, dimensions, and explanations of any unusual features are required. Data as to age, occupation or schooling of the entrant will be welcomed by the editors and judges. The design may be of any type; space craft, commercial, military planes (fighters, bombers, troop transports), planes for the private flyer and sporting or racing airplanes. The entry each month judged the most practical or of the greatest significance will receive an award of $50; $25 for second place and $10 for third. Mail entries to Airmen of Vision, c/o Air Trails HOBBIES for Young Men, 304 E. 45th St., New York 17, N. Y. The editors regret they cannot enter into any correspondence on submissions.

America's Knights of the Sky...

The Spartan Band that held the pass,
The Knights of Arthur's train
The Light Brigade that charged the guns,
Across the battle plain
Can claim no greater glory than
The dedicated few
Who wear the Wings of Silver
. . . on a field of Air Force Blue.



For Fellowship...High Adventure and a Proud Mission... wear the wings of the U. S. Air Force!

In days gone by, young men in shining armor ruled the age. Today, a new kind of man rules the age—America's Knights of the Sky, the *Air Force Pilots!* They rule from on high, in flashing silver-winged Air Force jets . . . a gallant band that all America looks up to! Like the Knights of old, they are few in number, but they represent their Nation's greatest strength.

If you are single, between the ages of 19 and 26½ and a high school graduate, you can join this select flying team and serve with the finest. You will be given the best jet training in the world and graduate as an Air Force Lieutenant earning $5,000 a year. Your silver wings will mark you as one of the chosen few who ride the skies in Air Force jets.

As an Air Force Pilot, your kingdom is space—a jet is your charger and your mission is the defense of America. You are a key defender of the *American* faith, with a guaranteed future *both* in military and commercial aviation.

Join America's Knights of the Sky, new men of a new age. Be an Aviation Cadet! For further information, fill out this coupon.

UNITED STATES AIR FORCE

F1

AVIATION CADET, AFPTR-P-4
Headquarters, U.S.A.F.
Washington 25, D. C.

Please send me information on my opportunities as an Air Force Pilot.

Name_____

Address_____

City_____

State_____

BLUE RIBBON MODEL

BLUE RIBBON MODEL

BLUE RIBBON MODEL

BLUE RIBBON MODEL

Pre-assembled S.E.5

■ A new approach to the traditional kit model is evident in the latest by Cavacraft (Philadelphia, Pa.)—when you open the box you find a pre-assembled model, ready for cementing and covering. There are two World War I numbers, an S.E.5 and the Fokker D.7.

The manufacturer has cut all parts; most are assembled; after a little checking to make sure every part is lined up, you cement them together just as you lifted the model out of the box. The advanced enthusiast will probably want to round off balsawood-edges, streamline the plywood interplane struts, etc.

The fuselage has sheet balsa sides and a solid balsa top with a hole for the cockpit.

You get a large sheet of decals for wings and rudder. The model has a 14" span, and is intended for .02-.074 engines.

1—Provision for any A/2 engine. 2—Shaped balsa nose block. 3—Die-cut plywood mount. 4—Formed steel wire landing gear. 5—Rubber wheels. 6—Die-cut plywood fin and skid piece. 7—Color decal insignia. 8—Die-cut sides, formers, bottom, shaped top (assembled in box). 9—Die-cut plywood wing struts. 10—Die-cut balsa wing parts (assembled in box), covering material.

$7,000 Renault

■ Highway Pioneers' new series (#4) of plastic scale assembly kits by Revell Inc. (Venice, Calif.) includes the 1913 Mercedes, 1915 Fiat Tourer, 1907 Renault Limousine, Jaguar XK-120 and MG Model TD.

This kit, like others sold by Revell, has the aspects of an ultra-simple jigsaw puzzle. When you dump the plastic envelope of parts on the table you feel a bit bewildered. But then things come into focus, for a few trial assemblies show that you just can't go wrong.

The pieces are beautifully made, with all sorts of fine detail molded right in. No tools are needed.

Instructions give the proper color scheme for each model in the series. In the case of our Renault, most of the brown plastic of which it is made is covered up, but the rear seats should be brown: you leave this part unpainted.

All molded polystyrene parts: 1—Body top piece. 2—Upholstered rear seats. 3—Main body formed in halves. 4—Fenders and chassis assembly. 5—Rotating wheels, scale axles, wheel hubs. 6—Scale lanterns. 7—Scale chauffeur. 8—Radiator and engine hood 9—Head lamps, bumpers, all small detail parts molded separately. 10—Scale springs.

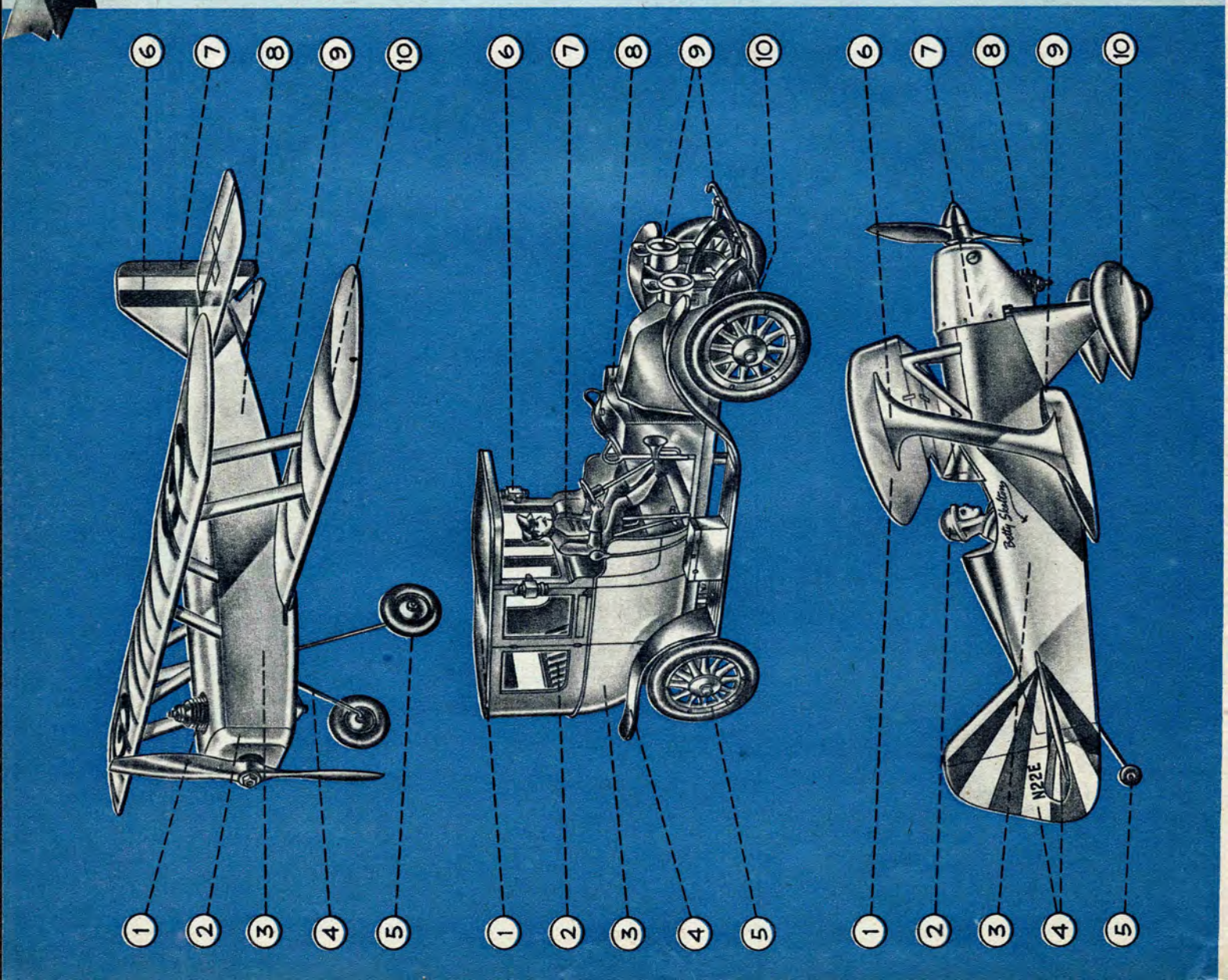
Pretty Pitts Bipe

■ Another very-close-to-scale kit model by Scientific Model Airplane Co. (Newark, N. J.) is the Pitts Special, better known as "Little Stinker," and flown to fame by stunt champ Betty Skelton. Modeled by Walter Musciano, this control-line kit follows closely the construction lines of others in the Scientific hangar. Upper wing has 14" span; plane will carry engines from .039 to .074 cu. in.

Radial engine mounting is employed; the plans show an inverted Cub. Easiest engine operation will be uncowled, but for complete realism model may be cowled with stamped sheet of thin aluminum included in kit.

Wings are 3/16" balsa, cut to planform and airfoil shape. All tail surfaces are 1/16" sheet. Complete parts are included for Walker U-Control installation; control horn and bellcrank are of aluminum. The control mechanism is external.

1—Shaped, die-cut balsa wing panels. 2—Plastic pilot. 3—Pre-shaped, hollowed balsa body. 4—Die-cut balsa tail parts. 5—Rubber tail wheel. 6—Die-cut balsa wing struts. 7—Shaped aluminum cowling. 8—Die-cut plywood mount for A/2 engine. 9—Hardware included for U-Control system. 10—Rubber wheels, formed gear struts, die-cut "spats" and gear leg fairings.



Simple Sea Scooter

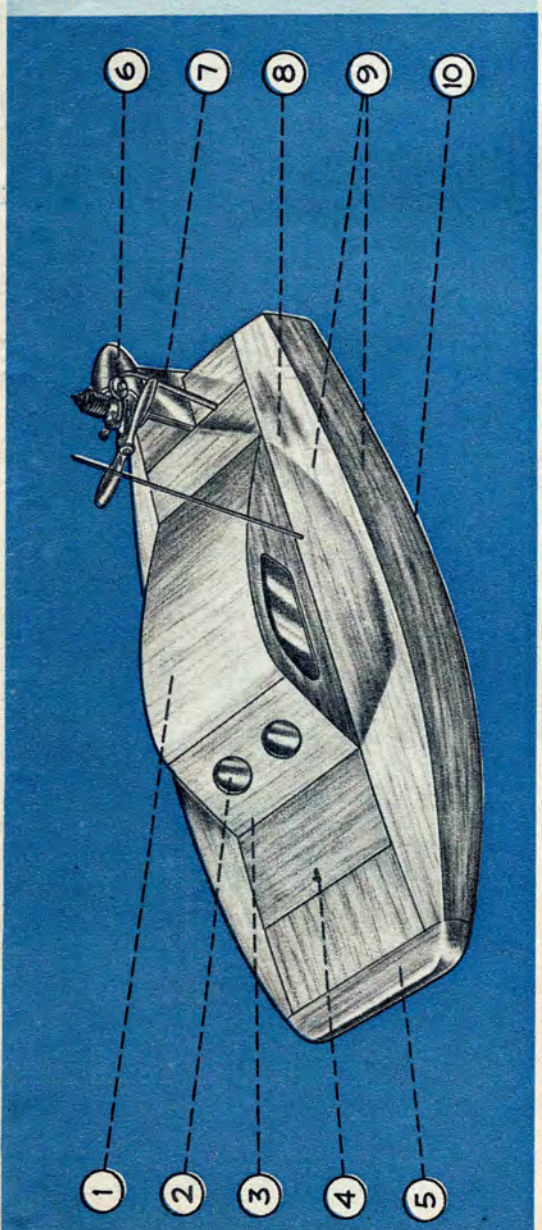
■ This Sea Scooter first appeared as an article in Air Trails; the boat was such a success that Master Modelcraft (New York 55, N. Y.) has it in kit form. It was designed by Aubrey Kochman expressly as a test bed for radio control equipment; you can fit all sorts of machinery and batteries in its capacious hull.

The ship has been redesigned a bit since the magazine article, to make it simpler to build. The kit pylon is a sandwich of hard wood layers, ½" thick.

Builders who prefer the more conventional water propeller will find plenty of room for internal mounting or one of the new glow plug outboards.

The ship is intended for engines from .049 to .099. Due to the high placement, it is suggested that the Walker pressure tank be utilized.

1—Die-cut mahogany veneer cabin roof. 2—Plastic window material. 3—Space provided for complete radio control installation. 4—Spring latch. 5—Formed balsa nose block. 6—.049–.099 cu. in. engine with pressure tank recommended. 7—Die-cut plywood and balsa pylon. 8—All stringers and formers die-cut. 9—Die-cut mahogany veneer top and side sheathing. 10—Die-cut plywood keel, balsa bottom covering.



see for yourself fellas!

THE GREATEST FLYING MODEL AIRPLANE IN AMERICA TODAY!

SPACE BUGGY

by enterprise

complete with super-powered, instant-starting SPACE BUG Jr. engine

snaps together in a jiffy

- No tiresome construction. Ready to assemble and fly in an hour!
- Sleek finished Balsa body and wings . . . No measuring . . . All parts keyed and indicated for perfect fit . . . Complete hardware!
- Formed pushrod!
- Extra parts and accessories never before offered in any flying model!
- Genuine unbreakable plywood elevator!
- Easy-guide Control Handle . . . self aligning controls . . . metal control mount!
- Flies up to 10 minutes without refueling!
- Guaranteed for top flying performance and loads of flying fun!

amazingly LOW PRICED $6.95 COMPLETE WITH ENGINE

SEE THESE OTHER ENTERPRISE MODELS

WARHAWK
Scale Controline, 17½" wingspan .039 to .074 engines $1.95

F-51 MUSTANG
Scale Controline, 17½" wingspan .039 to .074 engines $1.95

KNOCKOUT
18" span, Controline .045 to .099 engines $2.50

BABY ERA
18" span, Controline .045 to .099 engines $2.50

ZENITH
18¾" span, Controline .039 to .099 engines $2.50

SLICK TRICK
17¾" span, Controline .039 to .099 engines $1.95

SKY LEADER
18" span, Controline .045 to .099 engines $2.50

BABY ERA BIPE
16" span, Controline .045 to .099 engines $2.50

SUPER KNOCKOUT
24" span, Stunt Controline .099 to .199 engines $3.50

SUPER ZENITH
23⅛" span Stunt Controline .099 to .016 engines $3.50

AIR RACER
18" span, Controline .065 to .199 engines $3.39

SHADOW
32" span, Free Flight .030 to .099 engines $1.95

CHAMPION 36" span, Free Flight .045 to .099 engines $2.50

TOWLINE TERROR
24" span, Glider completely pre-fab $1.00

TOW-LINER
24" span, Glider completely pre-fab $1.00

CONTROL MASTER R.C. UNITS

TRANSMITTER
Model 27X—27.255 mc Greatest Range Available $29.50

RECEIVER
Model 27RH-2—27.255 mc Genuine Hard Tube Type $19.95

FIELD STRENGTH METER
Model FS3 Complete R.C. Testmeter $14.95

ENTERPRISE MODEL AIRCRAFT, MINEOLA, NEW YORK

If no local dealer is convenient, mail orders will be filled by Enterprise Model Aircraft Dept. T-3 Mineola, N. Y. Please include 25c packing and postage.

HOW TO MASTER "A-B-C" OF RADIO!

BUILD YOUR OWN WORKING RADIO RECEIVER!

Easy Screw-Driver Assembly!
No Soldering! No Electricity!

The pleasant 'fun' way to learn what makes radio 'tick'! Learn as you assemble. Learn parts identification and their function in converting air-waves to audible reception! Screwdriver is ONLY tool required. All tedious work eliminated! Super-detailed diagrams, schematics & instructions to speed the project. It's a great thrill to tune-in on a receiver YOU made workable.

$12.95 less batteries

2 TUBE RADIO KIT

Compact-size 'power-house' for standard broadcast-band, local or distant signals! This complete, 'screw-driver assembly' kit includes a 4" Alnico P.M. Speaker. Sturdy, fibreboard carton converts into practical, portable cabinet! Tubes, wire, everything is in the kit—ready to assemble.

$7.95 less batteries

1 TUBE RADIO KIT

You can assemble in a jiffy!

High-efficiency, modern standard broadcast-band circuit! Receives local and distant signals. Dry-cell battery operated. Complete kit contains: earphone, tube, wire. Fibreboard carton makes attractive, portable cabinet. BY MAIL: If no dealers near you, order your radio direct, include check or money order from prompt, postpaid shipment. Send your order now.

CRYSTAL Receiver KIT

An ideal 'beginner-project' is a crystal receiver! Kit contains tuning coil, crystal, earphone, wire and step-by-step instructions. $3.00

AIR CHAMP SALES CO. 57-31 (Dept. H) Bergenline Ave., West New York, N. J.

For fast delivery
..careful service!

The finest in model airplanes and crafts. Order today!

Also a complete stock of model railroads, railroad accessories and toys. Order your needs today. Please write us on your company letterhead for our new catalog for 1954. *100% Wholesale.*

P.O. BOX 594 A5 **DEALERS HOBBY - SUPPLY**
OTTUMWA, IOWA

Aviation Cadets

(*Continued from page 41*)

he may go on to specialize for a rating as navigator-bombardier, electronic-countermeasures officer, an armament operations officer, or aircraft performance engineering officer.

Shall we start traveling? Whether you're accepted for pilot or observer training, your first stop is Lackland AFB (Air Force Base) near San Antonio, Texas. Here all Aviation Cadets get their Preliminary Officer Training—the new name for "Pre-flight." Here you don't fly in any kind of airplane. During the 12-week program you learn how to be an AF officer and a leader. At the short-arm range you are taught to fire a .45. In the classroom you learn Air Force administration, military management, military law, supply and logistics, military geography, intelligence, air warfare, survival training. You get plenty of drill and physical training.

Okay, the three months of "Prelim" officer training are over. Say you're an Aviation Cadet. The next phase for you will be Primary Flight Training, which lasts six months. You will go to one of nine civilian-operated air bases—and an effort will be made to send you to the one nearest your home. These "contract" schools are located at: Marianna, Fla.; Colombus, Miss.: Moultrie, Ga.; Bartow, Fla.; Malden, Mo.; Bainbridge, Ga.; Marana, Ariz.; Kinston, N. C.; and Hondo, Tex.

You will live in the most modern housing. At a typical Georgia contract air base, for example, the units look like up-to-the-minute motels scattered through the pines. Each student has his own bed, desk-table, built-in clothes closet. At Primary you start learning to fly. Your instructors will be civilians—former WW II or Korean combat vets, former airline pilots, civilian operators. They are carefully selected, and having been through a few mills themselves, they take a genuine personal interest in helping you along. The present contract schools have the lowest accident rate in the history of the Primary program.

First you go aloft in a single-engine Piper Cub "puddle jumper" for 25 hours of "flight screening" wherein your flying abilities are evaluated. Next comes the rejuvenated reliable T-6 Texan trainer for 15 hours of dual instruction. At the same time in the classroom on the ground you are taking subjects like aircraft engineering, weather, navigation, how aircraft engines work, radio and the like. Then comes the big day: You solo in the Texan! Once soloed, you learn the intricate aspects of acrobatics, formation flying, basic instrument flying, night and cross-country.

Then begins phase three for the Aviation Cadet—Basic Flying Training. First, however, it must be decided whether you will be trained for flying in single or multi-engine planes, which in turn determines if you will be assigned to fighters, interceptors, bombers or transports. The decision about single or multi-engine craft depends on your own choice, the instructors' recommendations and the needs of the Air Force. (In recent classes, 80% of students have decided on jets.)

It might be noted that height may play a part in the decision. Although new regulations permit you to be over six feet in height for jets, your sitting height must not be over 38 inches. You have to be under 70 inches tall for in-

(*Continued on page 74*)

Look Fellows!

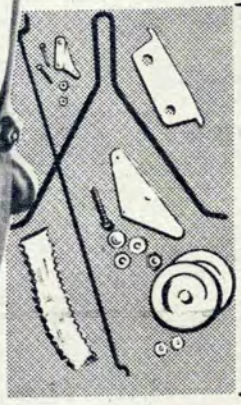
A BIG 30 INCH PROFILE BASIC TRAINER

- AMAZING FLYING ABILITY
- BEAUTIFULLY PRE-FABRICATED
- ALL NEEDED ACCESSORIES
- NEW FIXED FLAP DESIGN that eliminates offset rudder, offset motor and wing tip weight for easier flying.
- IMPROVED DESIGN of the very popular Trixter Trainer, developed by the knowledge obtained out in the field through study of the beginner's requirements.

constructed to stand terrific abuse

$3.95

WING SPAN 30 inches
Engine .14 to .19 disp.
motor, flying equipment and liquids not supplied.



Here's what you get with this smartly designed kit:

Complete bellcrank assembly.
Elevator horn with mounting bolts.
Wheels. Wheelocks.
Hinging material. Finished push rod.
Finished landing gear.
Finished wing tip line guide.

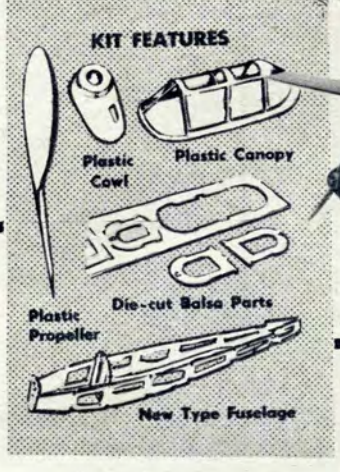
COMPLETELY PRE-FABRICATED. Hard wood motor mount. All can be assembled in a jiffy.

The Best Yet! Really New!
3 FLYING MODEL KITS

Ready for you at your hobby store.

Kit 50-1
North American Trainer T-28
16" Wing Span

These three additions to the Guillow fifty-cent line have the new one-piece side frame construction that saves you a lot of time. Note the gleaming plastic canopy, propeller, and cowl to give strength and beauty. All die-cut balsa construction. Clearly illustrated step by step plans will help you make a beautiful plane that is designed to really fly. If you want the best buy Guillow designed kits.



Kit 50-2
DeHavilland Chipmunk
17" Wing Span

Kit 50-3
Cessna L1 Bird Dog
18" Wing Span

Eight other models for your collection . . .
with all the features of the three new models but without one piece side construction and plastic canopy.

BRITISH SE-5
KIT 50-4

CESSNA
KIT 50-5

WACO CUSTOM
KIT 50-6

MONOCOUPE
KIT 50-7

AERONCA CHAMPION
KIT 50-8

HAWKER HURRICANE
KIT 50-9

SPITFIRE
KIT 50-10

VOUGHT CORSAIR
KIT 50-11

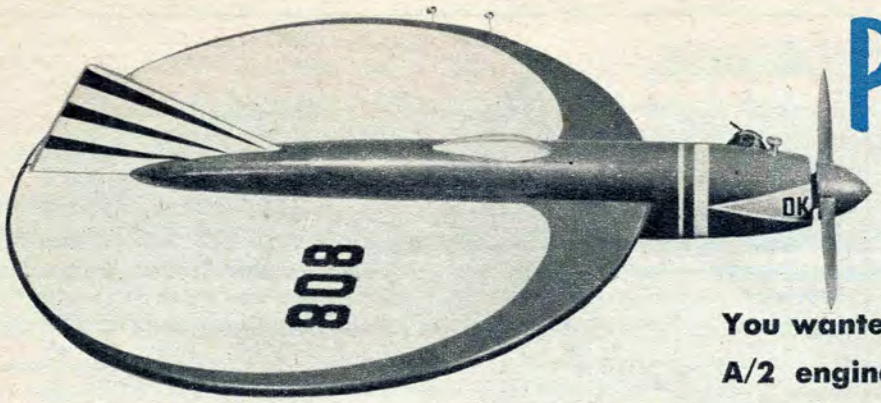
50¢ each

Note large wing span.

GUILLOW'S

If not available at your Hobby Dealer, send direct to factory adding 25c for packing and postage in U. S. A., 40c outside U. S. A.

PAUL K. GUILLOW WAKEFIELD, MASS.



Pixilated PLATTER

You wanted a smaller "Sassy Saucer" for A/2 engines? Watch the eyeballs pop!

■ After Air Trails ran the "Sassy Saucer" flying control line whizzeroo, we had such a tremendous amount of interest in the model—the next natural step seemed to be a Half-A size saucer. Here 'tis, simplified to the *nth* degree.

This simple little job you can easily knock out in an evening and set the neighborhood on its collective ear the following day!

You'll get top performance by keeping the platter as light as possible; go very light on the colored dope. Maybe colored paper would be the best bet if you wish to trim up your contraption.

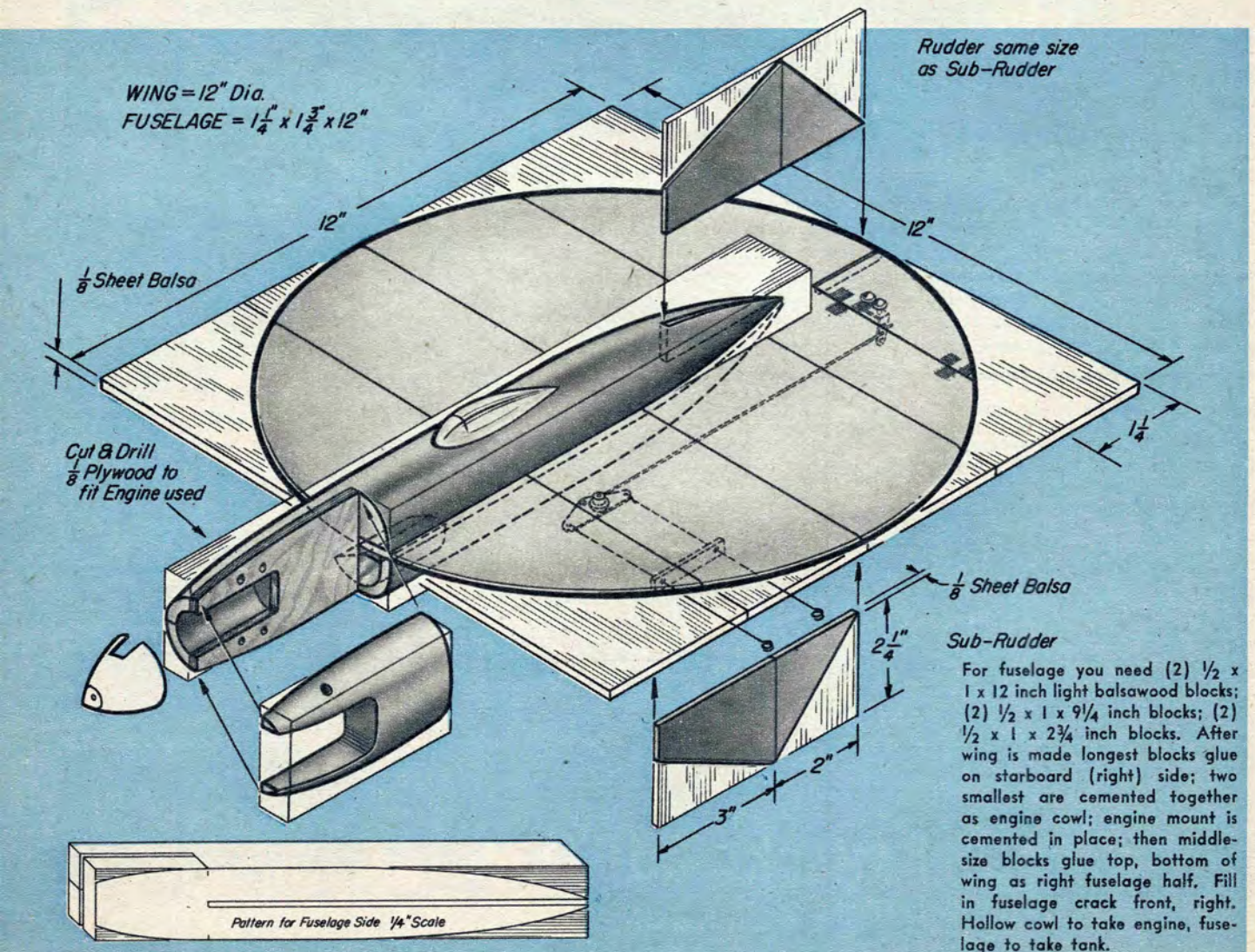
Herkimer's .049 Cub Diesel was installed with success here; we wanted to stay away from the fuel proofing problem. While sizes are only approximate, you should stick fairly close to the suggested dimensions to come up with the proper center of gravity location—right on the forward control line. As the C.G. position moves rearward the platter becomes more maneuverable but also more difficult to fly. Let the novice model pilot, then, maintain the C.G. along the leading control line; only the experienced flyer should experiment with a more rearward location.

As for different powerplants, you must use ultra-light wood to operate with a .035 engine; any healthy .049 should be fine; an .074 will be fast; and with an .09—brother, you've got a bomb on your hands.

Launching is done by your assistant holding the right wing and slinging the plane out at a good clip. This will keep the platter on the end of the lines; just tell him to "scale it foward."

Do we have to go into construction? Building up of the fuselage is covered in the caption on the "plan." Everything is solid except for the fuselage cut-out to accommodate whatever tank you use and the cowl cut-out to take the engine.

After you've completed and test-hopped your Pixilated Platter, try for some good flight shots (no blurs, please). For those we run, Air Trails HOBBIES For Young Men comes up with $10! Now that bit of news should certainly spur you on with the camera—no?



For fuselage you need (2) ½ x 1 x 12 inch light balsawood blocks; (2) ½ x 1 x 9¼ inch blocks; (2) ½ x 1 x 2¾ inch blocks. After wing is made longest blocks glue on starboard (right) side; two smallest are cemented together as engine cowl; engine mount is cemented in place; then middle-size blocks glue top, bottom of wing as right fuselage half. Fill in fuselage crack front, right. Hollow cowl to take engine, fuselage to take tank.

Most Amazing Radio Control Ever Offered Modelers

THE NEW SENSATIONAL

BABCOCK 3 Channel R/C

that gives guaranteed reliable

FULL PILOT CONTROL

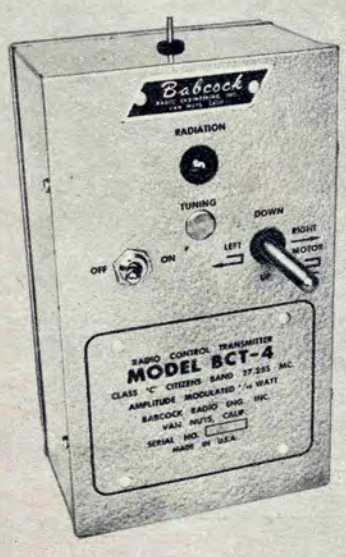
OF MODEL PLANES AND BOATS

WITHIN A VISION RADIUS OF 2 MILES

Deluxe IN EVERY RESPECT

EASY TO OPERATE

EXTREMELY SENSITIVE RECEIVER



HAND HELD TRANSMITTER
WITH 4-POSITION CONTROL STICK

FULL CONTROL OF ELEVATORS, RUDDER AND MOTOR SPEED • SAME AS PILOT OPERATION

The finest, most complete R/C system of all—as easy to handle and tune as the simplest single channel set. Designed for the seasoned model flyer and boat builder, it has everything—same exclusive features and construction as the famous Babcock military R/C. 4-position Control Stick on hand-held Transmitter moves for up, down, left or right guidance. The luxury quality, extremely sensitive Babcock Receiver responds to every command instantly, from any line-of-sight position within a radius of 2 miles.

BABCOCK BCR-4 RECEIVER (3 Channel) virtually crash-proof. One simple tuning adjustment. Constant carrier, audio tone. Hermetically sealed relays and audio filter unit, not tuned reeds. Low current drain assures long life. Total installed weight, including weight of servos, batteries and receiver, 2 lbs. Easy to install. Perfect performance, unequalled reliability, deluxe in every respect. See catalog! Price with tubes, relays, connector and instruction book, only $86.00.

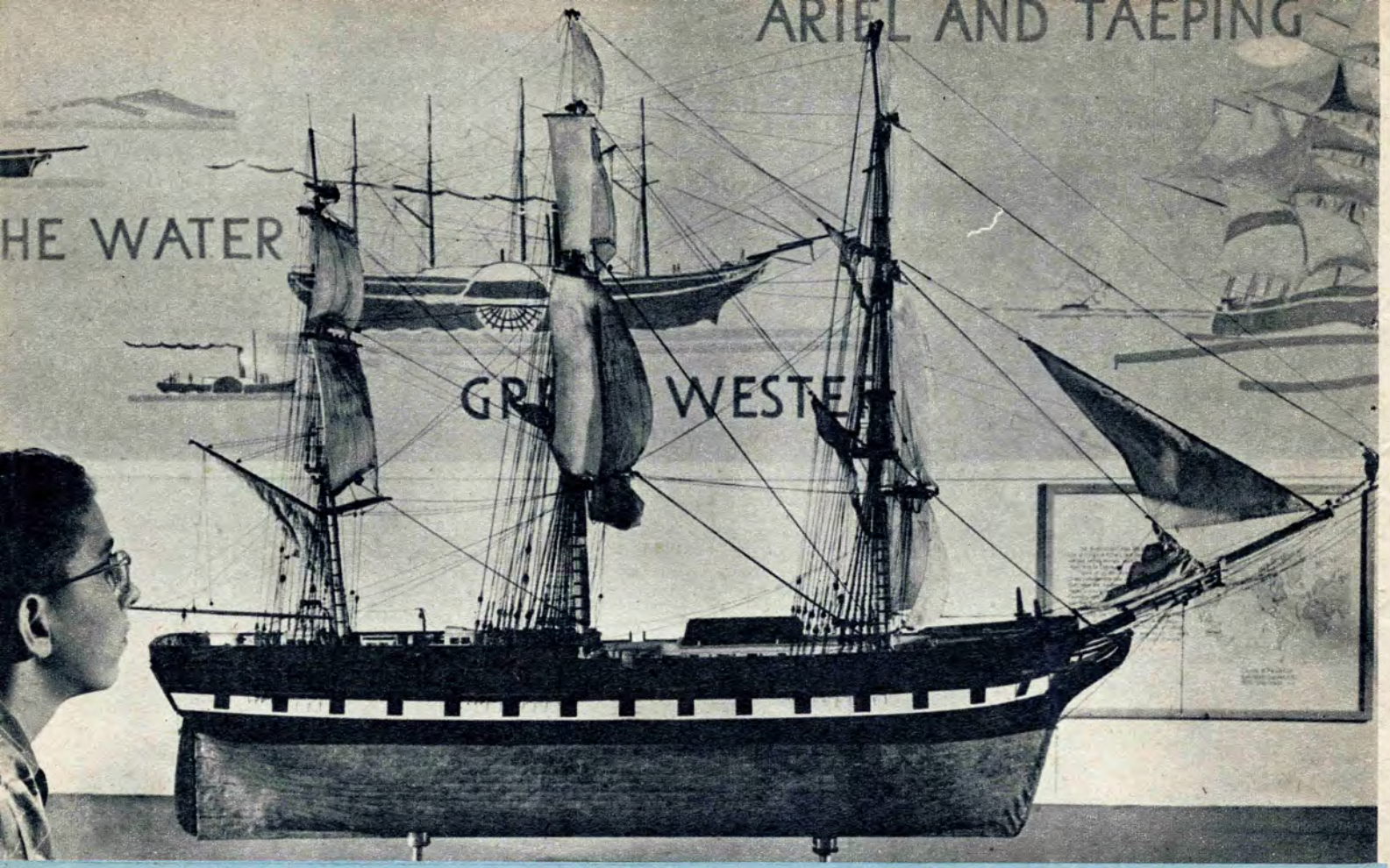
BABCOCK BCT-4 TRANSMITTER (3 Channel) with 3-ft. whip antenna. Sturdy metal, gray Hammertone case 4¾ x 3½ x 8" high, weighs 4 lbs. with batteries. Hand-held, entirely self-contained. 4-position control stick, single tuning adjustment, radiation indicator, on-off switch. Range up to 2 miles line of sight. Frequency 27.255 m.c. Price including tubes, crystal, antenna, less batteries, only $69.00.

BABCOCK BCR-4 INSTALLATION KIT contains connector to receiver, color coded wire, sleeving, battery connectors, DPST on-off switch, phone jack and milliameter jack. Finest quality parts that simplify Receiver installation. Price $3.50.

BABCOCK-BONNER SERVOS, available at moderate prices, are highly recommended.

DEALER DISTRIBUTED • ASK FOR CATALOG OR WRITE DIRECT

BABCOCK RADIO ENGINEERING, INC. • 7942 Woodley Ave., Van Nuys, Calif.
Export: Frazar & Hansen, Ltd., 301 Clay St., San Francisco, Calif.



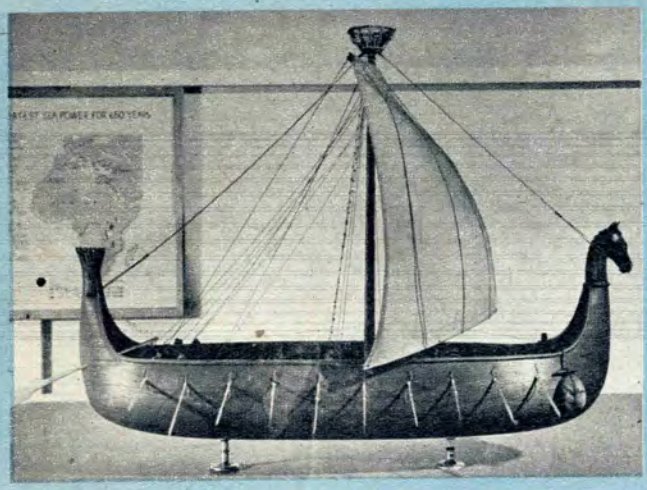
Isaac Webb, packet ship of Black Ball Lines, sailed between New York and Liverpool until 1863. Westward trip took 34 days, eastward 22 days.

SHIPS of OLD

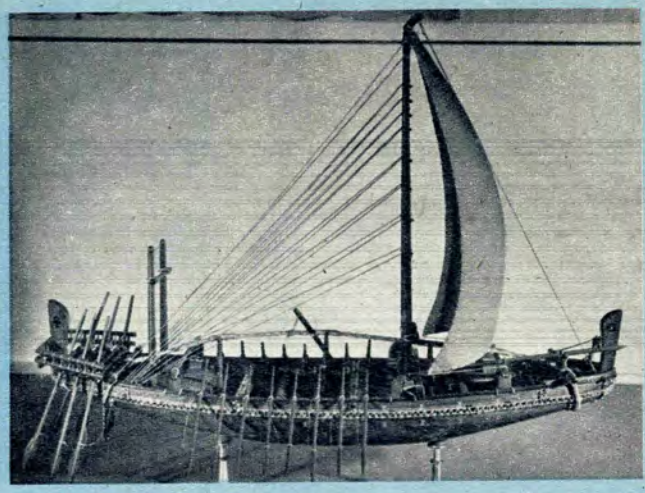
Sail Again along Chicago's Shore

■ Where would this country be if Columbus had not set sail to seek another ocean route to India, or if America's future bluebloods had not cast anchor of their good ship Mayflower within sight of Plymouth Rock? The economic structure and the trade of an entire world, as a matter of fact, have depended on water transportation from the time man first saw a log float on a river. The role played by shipping in the progress of civilization is nowhere demonstrated so dramatically as at Chicago's Museum of Science and Industry where models of some of history's most famous seagoing craft are on display. Meticulously reconstructed to exact scale from every available picture and document.

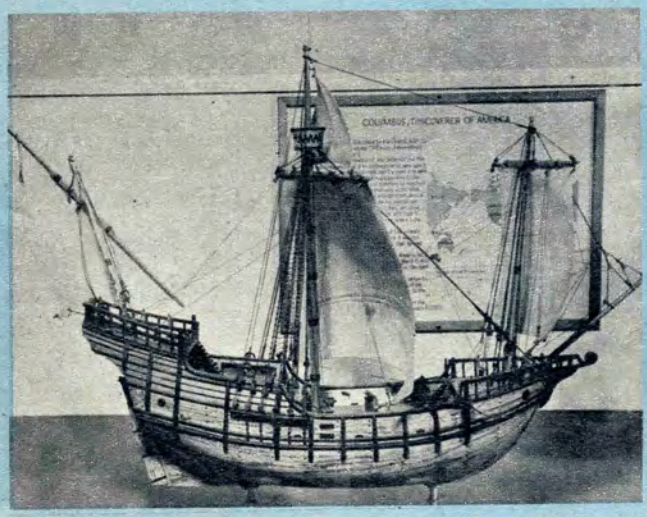
Sturdy and ageless, the Chinese river junk as used on Yangtze is the backbone of the country's trade, for railroads are practically non-existent and terrain forbidding.



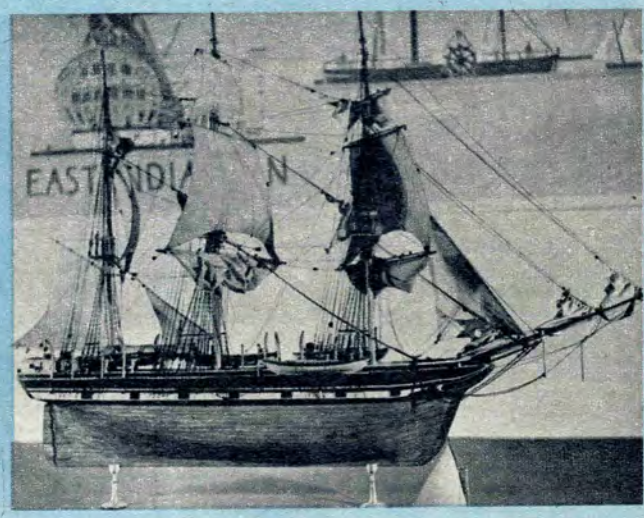
Dating back to 1650 B.C., this Phoenician ship was propelled by 20 oars and a sail. Two steering oars are in the stern. Note stone anchor and crow's nest. One of the ships of this type circumnavigated Africa.



The earliest seagoing type ship in the records is this Egyptian bark used in 2904 B.C. during the Pyramid Age, for voyage to Babylon. In addition to the sail it had sixteen propelling and six steering oars.

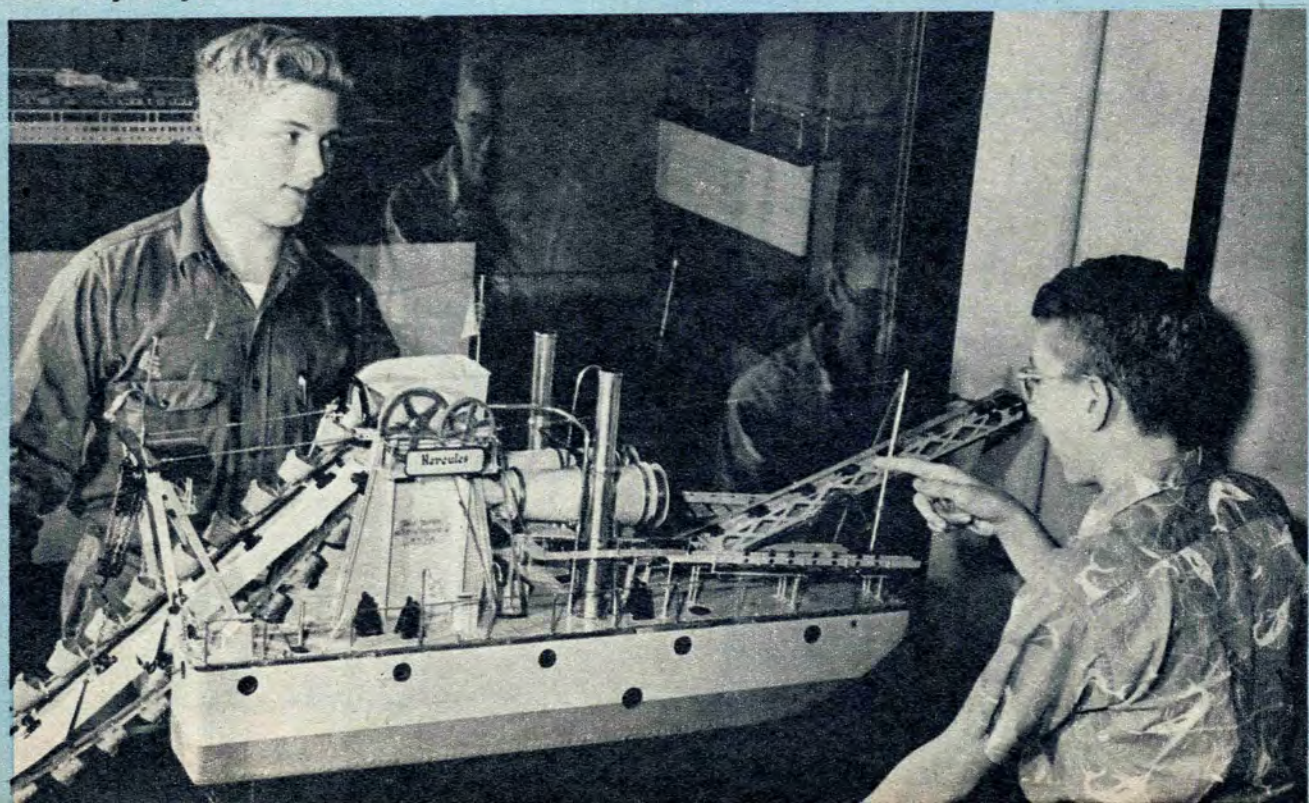


One of the most famous sailing vessels of all times, Santa Maria, the flagship of Christopher Columbus. In this ship he first sighted the New World, Watling Island, after a voyage of 69 days from Spain.



Alice Mandell, New Bedford whaler of 1851, shows typical copper sheathing. Whalers were deep-bodied ships, and sat low in water homeward-bound after several years of collecting oil cargo.

Gold-washing dredge. Bucket brought gravel and sand to perforated rotary cylinders; after elimination process gold remained.



Members of the 1953 National Championship team: Joe White, Wm. White, Jr., Frank Hauser, Carl Curtis, A. Grenoble, James Parrish.

"TAKE IT FROM US.. WE WON WITH GOLD SEAL!"

"As a team we all worked together... and we all agreed on the superior performance of Gold Seal! Quicker starting ... peak efficiency from cool mornings through hot afternoons... a fuel we could count on... these things made Gold Seal a necessity for our engines. Why not switch to Gold Seal today and join the winning team!"

"EAST TO WEST... IT OUTPERFORMS THE REST"

OHLSSON MFG. CO.
1547 West Sixteenth Street
Long Beach 13, California

HAW-KI
HOBBY SUPPLY CO.
WHOLESALE ONLY

ALL NATIONALLY ADVERTISED MAKES

★ MODEL AIRPLANES
★ RACE CARS
★ RAILROAD EQPT.
★ CRAFTS AND TOYS

WRITE
Today on your business letterhead for current catalog.
PROMPT SPEEDY DELIVERY

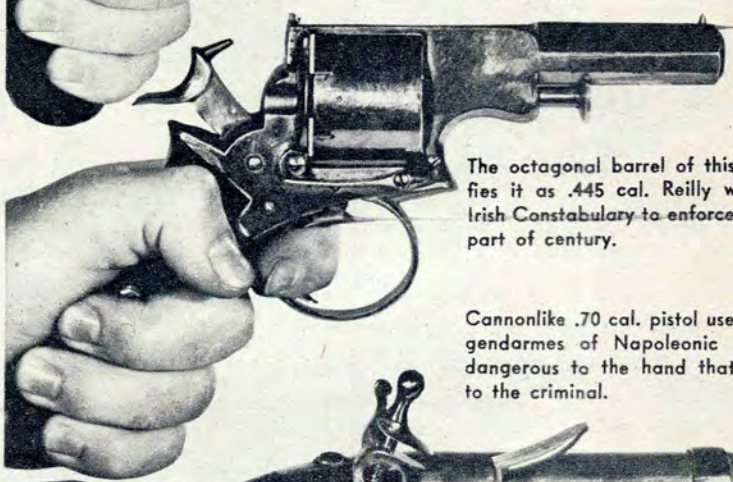
HAW-KI HOBBY SUPPLY CO.
DEPT. ATH-3 523 WEST 4TH
Davenport, Iowa

The LONG, LOADED ARM of the LAW

As far back as Napoleon's day, the world's police have used guns to protect life and property of peaceful citizens

Short weapons were always favorites with the police. This is a .36 cal. Belt New Police percussion Colt that was on duty about the middle of Civil War.

Present-day London bobby is no longer armed with a gun. In 1800, however, English constables wielded the single-shot, ball-firing flintlock Rigby.



The octagonal barrel of this gun identifies it as .445 cal. Reilly which helped Irish Constabulary to enforce law in early part of century.

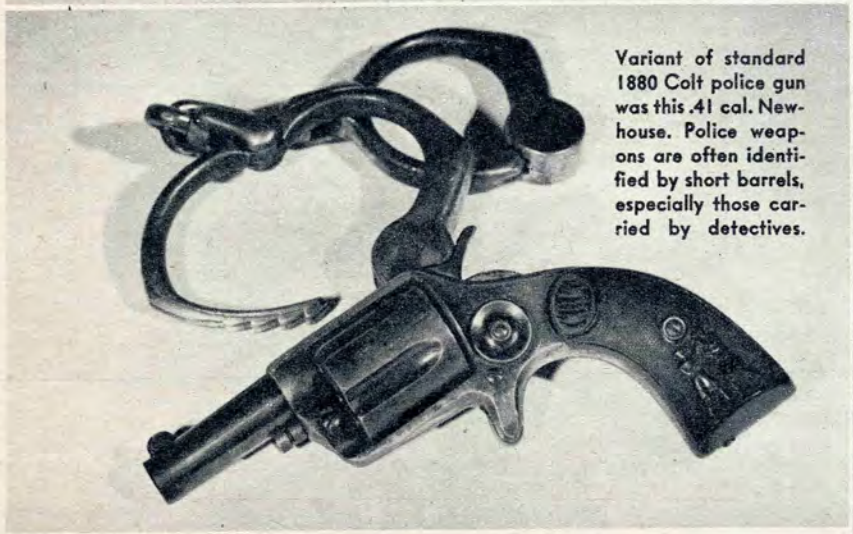
Cannonlike .70 cal. pistol used by French gendarmes of Napoleonic era was as dangerous to the hand that fired it as to the criminal.

The small but efficient Colt .31 was carried by Wells-Fargo agents in 1849 to discourage the badmen of the West from robbing coaches.

German 9 mm Lueger automatic pistol used by Nazi police. The gun stems from bigger World War I "Parabellum."

Contemporary police revolver, the .38 cal. Colt. Standard weapon for almost all police forces in the U. S.

Long barrel of the law was this .38 cal. Colt police revolver of 1870s. "Police and thug" grip distinguished such revolvers for many years.

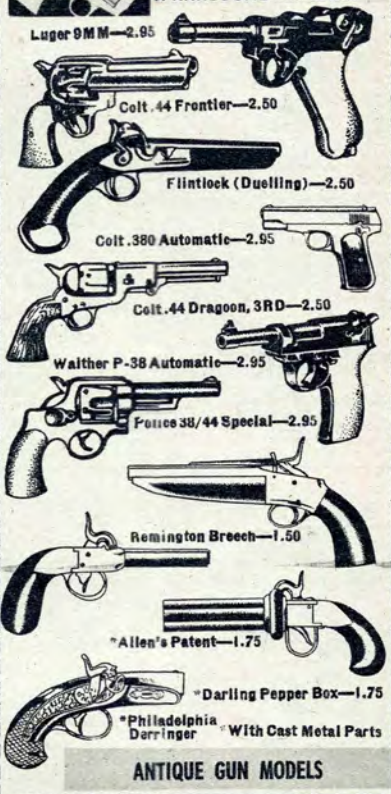


Variant of standard 1880 Colt police gun was this .41 cal. Newhouse. Police weapons are often identified by short barrels, especially those carried by detectives.

ANTIQUE GUN
REPRODUCTIONS

CONSTRUCTO KITS

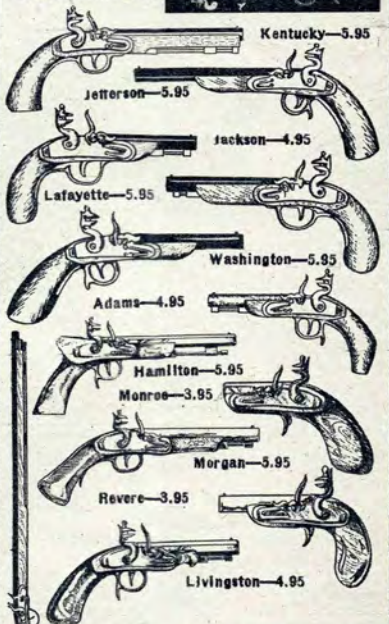
ALL PARTS AND FITTINGS CUT-TO-SHAPE! AUTHENTIC REPLICAS OF FAMOUS HISTORIC PISTOLS. MAKES A HANDSOME FIREARM.



Luger 9MM—2.95
Colt .44 Frontier—2.50
Flintlock (Dueling)—2.50
Colt .380 Automatic—2.95
Colt .44 Dragoon, 3RD—2.50
Walther P-38 Automatic—2.95
Police 38/44 Special—2.95
Remington Breech—1.50
*Allen's Patent—1.75
*Darling Pepper Box—1.75
*Philadelphia Derringer
*With Cast Metal Parts

ANTIQUE GUN MODELS

LOOK LIKE MUSEUM PIECES. FULLY MACHINED WOOD STOCK WITH METAL PARTS IN SHAPED PLASTIC.



Kentucky—5.95
Jefferson—5.95
Jackson—4.95
Lafayette—5.95
Washington—5.95
Adams—4.95
Hamilton—5.95
Monroe—3.95
Morgan—5.95
Revere—3.95
Livingston—4.95

KENTUCKY RIFLE KIT: $14.95
THIS IS THE TYPE RIFLE USED IN "LOG CABIN" DAYS FOR BACKWOODS HUNTING. MAKES A HANDSOME PIECE FOR OVER THE FIREPLACE IN LIVING ROOM OR DEN.

When Ordering Guns Add 25c P. & P. Each
See Constructo 50c $1.50 and Select Ship Model Kits from $5.00
Catalogs: *H.O. 50c *Ship 50c *Tinplate 50c *Soldiers 25c Leathercraft 10c
*With Money Back Coupons
DEALERS: REGULAR TRADE PRICES SOLD THROUGH SELECTED JOBBERS

POLK'S MODEL CRAFT HOBBIES, Inc.
314 5th Ave. (32nd), Dept. H-254 NYC 1

WANTED!

1,000 HOBBY-MINDED YOUNG MEN

to serve on

Air Trails HOBBIES'

Reader Research Panel

If you are selected you receive a membership card to show that you represent all U. S. hobbyists!

By participating in various studies, you will enable our editorial staff to keep Air Trails HOBBIES the magazine you want . . . and help America's top model manufacturers design the engines and kits you need.

Apply for panel membership now! Panel members will be under no obligations but your application for membership will be evidence of your willingness to help develop more hobby clubs, contests and national recognition for your favorite hobby activity.

Reader Research Panel
Air Trails HOBBIES FOR YOUNG MEN
304 East 45th Street, New York 17, N. Y.

Mr. _____

Address _____

City _____ Zone _____ State _____

How do you obtain your copy of Air Trails HOBBIES:
By mail ☐; on newsstand ☐; other.....
Age..... Married? ☐; Single? ☐
Are you employed? Yes ☐; No ☐
Full time? ☐; Part time? ☐
Are you attending school? Yes ☐; No ☐
Please check the final year of school completed by you so far:
☐ Grade school. What year? .....
☐ High school. What year? .....
☐ College. What year? .....
☐ Graduate school. What degree? .....
Please check those hobbies that interest you most:
☐ Model Planes
☐ Coin Collecting
☐ Model Railroads
☐ Gun Collecting
☐ Model Vehicles
☐ Photography
☐ Model Boats
☐ Stamps
☐ Model Cars
☐ Other; please detail:.....
.....
.....

ATH-RRP-554

Aviation Cadets

(Continued from page 66)

terceptor training. The tall, tall boys are a cinch for bombers or transport planes.

You enter Basic, a five-month course. You return to Air Force fields, the kind with "AFB" after their names rather than the plain "AB"s that designate civilian contract fields. If you are a single-engine boy, you go to single-engine schools at bases in Arizona, Texas and Mississippi. Here you first fly in the sleek new T-28 trainer. During the 55 hours in this stable, beautifully handling job you get advanced instruction and practice in navigation, formation flying, cruise control and the like. Then you're ready for your initial go at the jets. With an instructor behind you in the cockpit you take off in a Lockheed T-33, a two-place jet trainer with features similar to the F-80 Shooting Star. This dependable ship can climb to 40,000 feet, cruises from 300 to 500 mph. And eventually you solo as a real jet jockey.

If you are a multi-engine trainee, you head for bases near Lubbock, Tex., and Enid, Okla., and fly the T-28 or the B-25 Mitchell medium bomber. And whether one or two engines pull you through the atmosphere, you continue with your ground schooling, both military and academic. At the completion of Basic Flying Training you get your commission as a USAF 2nd Lieutenant with that income of more than $5,000 per, as well as the officer allowance connected with your rank and flying status. Remember, this is just 42 weeks after you entered Primary, or from the time you first climbed into an airplane.

Once commissioned, the Aviation Cadet is known as a Student Officer, and proceeds to the fourth and final phase of pilot training. This is called Advanced and given at bases in Texas, Arizona, Georgia, Florida, Nevada and Kansas.

Now you begin to have bigger and better periods of relaxation, can enjoy local hospitality more fully. If stationed at Nellis in Nevada, for instance, you can go on a long pass to Nellis AFB Rest Camp nearby, an outdoorsman's paradise nestled among the firs and pines up on Mount Charleston in the Nevada National Forest. Like rifle hunting? You can take a crack at the cagey cougar and elusive elk, or knock off squirrels and porcupine. In deer season the popular weapon is bow and arrow. Perhaps you just want to hike, or laze around at picnics in spring. The big stone fireplace in the main lodge will always welcome you back "home."

In Advanced you fly the famous planes that have written recent history, fighters, interceptors, medium bombers. If you're a single-engine man, you zoom aloft in such jobs as the F-86 Sabre, F-84 Thunderjet, the all-weather F-94 Starfire, the rocket-armed F-89D Scorpion interceptor and others. If multi-engine, you join the crew of a B-29 Superfort, or that of a B-47 Stratojet bomber.

As part of the Crew Training Air Force in Advanced, you learn to operate as a team. You use the radar gunsight in gunnery practice, carry out simulated high-speed, high-altitude bombing attacks on key industrial centers in the U. S., make the desert "bloom" on mock combat bombing missions.

Graduating from Advanced, you get those silver wings and ratings as U.S. Air Force Pilot. (The commission at the end of Basic was for 2nd Lieutenant, period.) Now you start your three years of active duty, a tour that may well take you around the world and back.

And what about the Aircraft Observer Cadet we left behind in Preliminary Officer Training? He goes on to a Primary-Basic course requiring about 10 months at various AFB's where the chief emphasis is on navigation. In the classroom he takes the theory of navigation, electronics, radar, math, aircraft instruments and the like. He tries out theory under simulated flight conditions on the ground, as in the "idiot box," the covered trainer for dead reckoning practice.

And he does plenty of flying. The main classroom upstairs is the T-29, that flat-bellied twin-engine military version of the Convair 240 airliner. . . . You and fellow students are in the briefing room at the base. The instructor gives all the facts necessary for the problem of the mission. (In its simplest form, this is to get the plane to the destination, on the Estimated Time of Arrival, and back home.) You plot the course on your map. Then, grabbing up your oxygen mask and DR kit, and after stopping off at the parachute pool for your "friend," you board the T-29.

The instructor picks you to "lead on the first leg"—to navigate the plane from the first to the second point on that map. "I want two winds an hour," says the instructor—you keep constant check on the direction and velocity of the wind. You fill in your log. Your fellow trainees take turns at navigating other legs of the fight. . . . Back at the base, in the briefing room again, you are told what you did wrong—and right.

What's in the Name . . .

Luke Air Force Base?

(Phoenix, Ariz.)

One of the most famous U.S. aces of World War I was "Balloon Buster" Lt. Frank Luke, Jr., in whose honor the city of Phoenix named its airport. He was the second ranking ace of the Army Air Corps, chalking up an amazing record of combat flying: 21 verified victories in 39 days of actual fighting, a total topped only in the Air Corps by the 26 kills of Captain Eddie Rickenbacker. Frank Luke was the first Army Air Corps pilot to be awarded the Congressional Medal of Honor; it was presented to the ace's father, since Frank was killed in action during the final days of the war.

DR—dead reckoning—is only one form of navigation learned in Primary. If the enemy jams your Loran or your visibility is zero, this elementary method comes in handy. You learn navigation-by-map-reading, when you can look out the window and check your course by landmarks below. And you get thorough practice in Loran—Long Range Navigation, for use over water and involving electronics. In time you may become an expert in celestial navigation. Toward the end of Primary you will draw "toughies" like a night radar mission. Learning to read a radar scope, how the bright dots mean cities below and dark lines stand for rivers, becomes second nature.

The course in electronics can be stiff

Cavacraft
AUTHENTIC SCALE MODELS

BRAND NEW ½A CONTROL LINE PRE-BUILT!

FLYING MODELS

The Two Most Famous World War 1 Fighters

BRITISH S.E.5 (Kit G-2) and
FOKKER D-7 (Kit G-3)

Lightweight for real flight performance! ½A Control Line Radial Motor Mount. Finest grade balsa used. Plywood struts and motor mount. Silkspan covering material. Rubber wheels, bushings and ready formed wire landing gear. Full color decals. 14" wing span—length 12½"

ASSEMBLED IN THE BOX
READY FOR CEMENTING!

A New Approach to Modelmaking

AT YOUR DEALERS $2.95

2045-47 North Trenton Avenue
Philadelphia, Pa.

—but don't get the idea that in observer training the purpose is to glean the geniuses and drop the rest. As a major at Ellington AFB said: "We make every effort to get a man through. We'd rather salvage or wash back a man than lose him by washing him out. After all, we're after proficiency, and if a man can finally learn all the things we give him, then we've got another observer for the Air Force."

After Primary the decision is made as to the kind of planes you will eventually be assigned to, whether B-36 or B-47s, intercepts, transports, and you start working with equipment according to your type. Again, the decision involves your own preference and capabilities and the needs of the Air Force.

You may or may not get bombardment training in Basic. With the requirements of the service rapidly undergoing changes, you may take photo reconnaissance. And your final crew training may not be obtained at a school at all, but at the operational base to which you are assigned.

Say you receive bombardment at Mather AFB in California. Here you'll hear talk of "shack," meaning to hit the target spang in the middle, and "CE," or circular error—how far a fellow missed. Your first practice mission will be in a T-29, where black drapery divides you from another student and the instructor. The only light is the weird kind coming from your radarscope. Later, in B-25s or B-50s, you will radar-bomb such realistic targets as the Roseville marshalling yards, with a bomb scoring unit on the ground keeping track of your progress and recording electronically where your bomb would have

(*Continued on page 79*)

1954 ★ EXTRA ★ 1954
A NEW 'VECO' DEVELOPMENT

"Temperature Controlled Clearance"

Thermodynamically designed within 'VECO' Engines, Reduces Friction between Cylinder and Piston, creating Greater Compression, and achieving a New High for Power-Output, outperforming all others in their class. See Your Dealer NOW!

'VECO' .29 or .31
. . $14.95 . . . .

VECO PRODUCTS

MAKE YOURS A 1954 MODEL
All parts are interchangeable with previous 'Veco' engines. Return your engine to the factory now and a small nominal fee converts your old engine regardless of condition.

Send for 'Veco's' New Illustrated folder of 50 quality items for enjoyment in model aviation. Engines . . . Airplanes Wheels and Accessories.

Henry Engineering Co.
P. O. Box 229, Burbank, Calif.

THE ENYA TYPHOON

IT'S NEW!
POWERFUL!

PHOTO-JAY SANDERS

Ideal Power for that New Model
SPORT STUNT RADIO
Precision Gasketless Construction

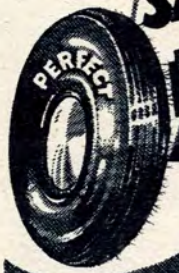
ONLY $10.95 FOR "19"
$13.95 FOR "29"

Complete Replacement Parts
HUGE SUPER PREFABRICATED
SCALE GAS MODELS: B-29, C-47, B-26, C-119, etc. List available on request.

ORDER NOW Money Order or C.O.D.

SAN DIEGO MODEL SHOP
3944 PARK BLVD.
SAN DIEGO, CALIF.
Calif. Orders Add 3%

PERFECT'S
NEW SELF-LOCKING WHEEL



REALISTIC
STURDY
CONVENIENT

and Only
Self-Lok*
has these features

* Concealed Self-Locking wheel retainer....
* Authentic Streamline Appearance....
* No Special Tools Required....
* Prices from 29¢ to $1.39

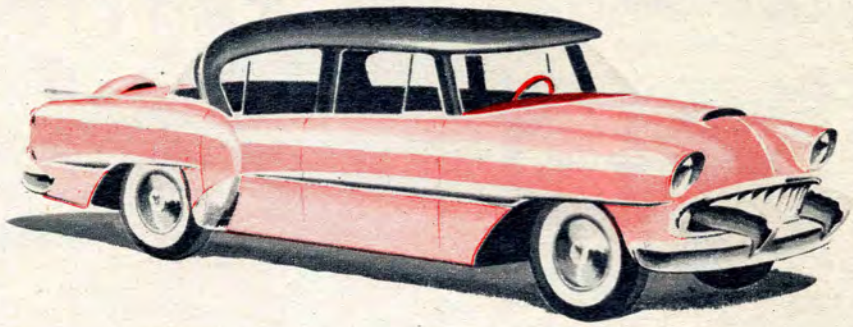
This New advanced design has no protrusions of any kind & fits 1¾" size tires and larger are factory pressurized and sealed to remain permanently pneumatic...

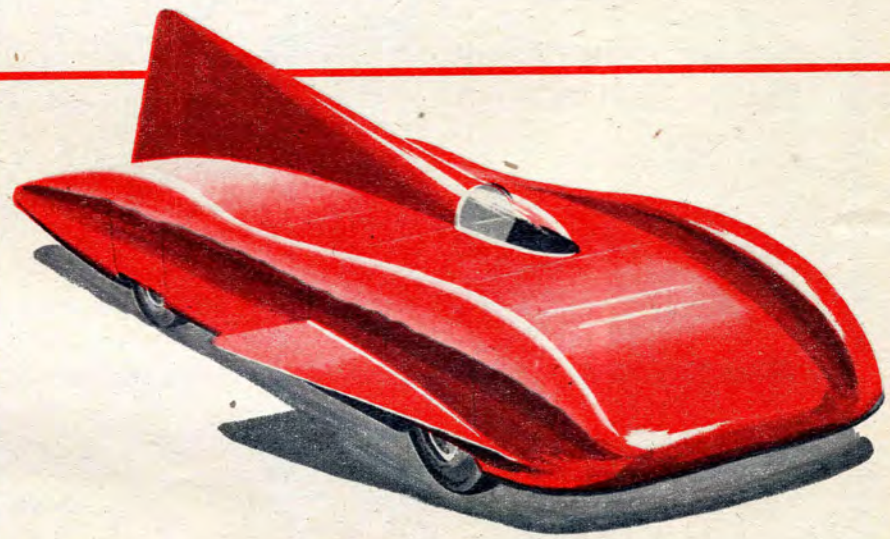
*PATENTS PENDING

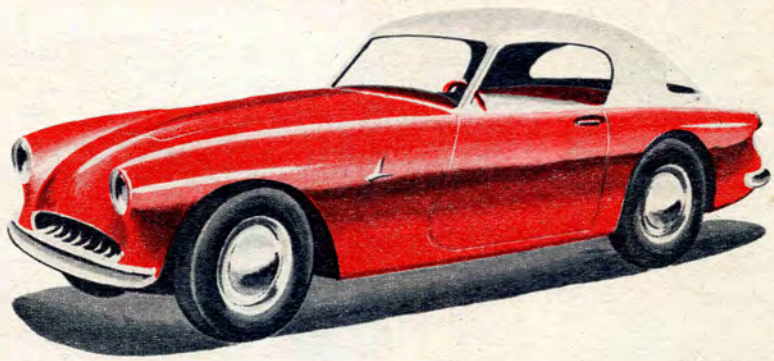
PERFECT PARTS CO.
109 FALLSWAY, BALTIMORE 2, MD.

Air Trails HOBBIES

AUTO DESIGN COMPETITION







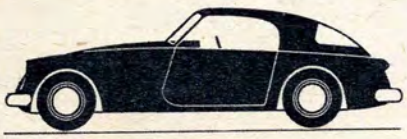
AWARDS OF $50.00—$25.00—$10.00 EVERY ISSUE

Cash awards will be made each issue for the three most significant auto designs submitted to this magazine. $50 will go to the top design, $25 to the second and $10 to the third. You may submit sketches for an original design auto, for a restyled car, for sportscars, family sedans, record cars, hot rods, military vehicles or unusual trucks. Include side, front, rear and top drawings, plus sketches of the proposed vehicle from three-quarter front and three-quarter rear positions. Sorry, we cannot enter into any correspondence about this contest. Send entries to Auto Design, c/o Air Trails HOBBIES For Young Men, 304 E. 45th St., New York 17, N.Y.

IT'S EASY TO ENTER YOUR DESIGNS

Well-deserved first prize could be this restyled De Soto Firedome 4-door sedan powered by the 170 hp V-8 engine. Customized look is achieved by outside spare, rear door windows re-done and sun visor projection of the roof. The air scoop on the hood has been dechromed, radiator grill altered by substituting straight bars for the former curved ones. Hooded headlights, sweeping cut-outs of fender skirts and addition of small chromed fins on rear fenders, give car rakish look.

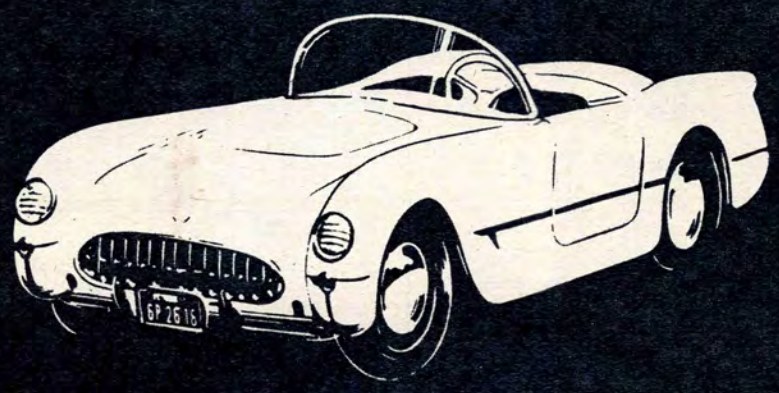
Second prize would be awarded to this high-speed racing car of the "Bonneville" type. It is suitable for either piston or turbine engine power. Auxiliary wing surfaces set at negative angle prevent front end from lifting by exerting downward pressure which increases with speed. Vertical fin serves to "arrow" racer during high-speed runs in crosswind. The fin-like effect of rear fenders also helps. More streamlining means more fin area.



The Sport Coupe should easily earn the third prize. Designed for Chevrolet, Ford or Plymouth chassis; follows closely the famous Italian body style, with the hood line below the fenders. Main object achieved is simplicity and good aerodynamic characteristics, in which the engine power is not dissipated in overcoming body drag. Seating capacity is three side-by-side in front seat. Fairly large baggage space behind permits installation of a jump seat for the youngsters.

- **Restyling**
- **Sportscars**
- **Family Vehicles**
- **Trucks • Originals**

Now
The New Chevrolet
Corvette



ACE
ALL-AMERICAN SPORTS CAR

MODEL KIT • EASY TO BUILD

Get an early start and surprise your friends with this scale model kit. All the beauty, detail and graceful styling of the Corvette—radiator grille, headlight guards, windshield, steering wheel, tail lights, bumpers, easy-to-shape balsa wood body. Everything furnished. Scale size plans make it easy to build. Paint it white with red seats—you'll love it!

AUTHENTIC SCALE MODEL • MOST PARTS PRE-SHAPED

ACE "CORVETTE" CAR KIT No. 30R

MADE BY ACE PRODUCTS • PASADENA 8, CALIFORNIA

KIT COMPLETE $1

Sold by Hobby Shops, Toy and Department Stores

CURTIS HAWK F11C4

32½" Span. Length 22¾". 1" Scale. A real collector's item. Finely detailed. Set has air wheels, ready cut pants, turned balsa cowl unit, parts printed on balsa. Const. set.....$4.50

Above model is suitable for use with ½A .049 to .075 Gas Motor

9' TAYLOR CRAFT GAS MODEL

9 foot span. Can use Radio control. Set has 36 ready cut wing ribs, cut plywood body formers, 18" carved prop, tail wheel unit, 2 full size plans, printed balsa, silkspan, etc. Uses "C" type motor, single, twin, or 4 cyl. motor. Set without motor or wheels, postpaid..... **$17.50**

Extra pair of 4½" airwheels, $3.00

BOEING PT17 GAS

45" Span. Can use 5 cyl. M5 motor to scale or B or C type motor. U control. Set has scale rubber wheels and all spec. parts, ready cut wing ribs, tail wheel unit and wheel. Const. set.. **$9.95**

Add 25c for postage. Catalog—10c coin

MINIATURE · AIRCRAFT CORP.

83 Low Terrace, Staten Island 1, N. Y.

POLK'S RADIO CONTROL HEADQUARTERS

PRESENTS THE

FLY BALL ACTUATOR

No sequence to remember. Proportional action with pulse control. Continuous operation — no rubber to wind! Develops 6 oz. pull on 3 volts. Easy to install, for small or large aircraft. **$7.50** plus 25c pp.

And E. D. ARISTROL RADIO CONTROL EQUIPMENT

E.D. Boomerang

- Longer tube life
- Antenna NOT critical
- Range exceeds 1 mile
- Compact small size
- No soldering
- Special low drain escapement

BOOMERANG RECEIVER & ESCAPEMENT 29.50

- Printed circuit
- Free Band
- Whip Antenna
- Keying Cord
- Crystal controlled

TRANSMITTER 29.50

E. D. ARISTROL UNIT COMPLETE WITH ESCAPEMENT $57.50

Special Heavy Duty 6 volt D.C. Motor for Boats and projects in this issue **$7.50**

DEALERS: Sold Thru Selected Jobbers.

POLK'S MODEL CRAFT HOBBIES, Inc.

314 5th Ave. (32nd), Dept. H-5354 NYC 1

CASH IN WITH YOUR CAMERA

Trick Pix

HOW TO WIN "TRICK-PIX" CASH

$25 cash award for each trick picture used here! Submit as many different entries as you wish; none should be less than 4 by 5 inches, and preferably 8 by 10" glossy prints. We will return all photos submitted, but cannot accept responsibility in case of loss or damage. Pictures may be of one-dimensional subjects (people, inanimate objects, cartoon caricatures, etc.) or can be table-top full-dimensional scenes. Amateur and professional photographers stand an equal chance. Keep the subjects humorous and/or unusual.

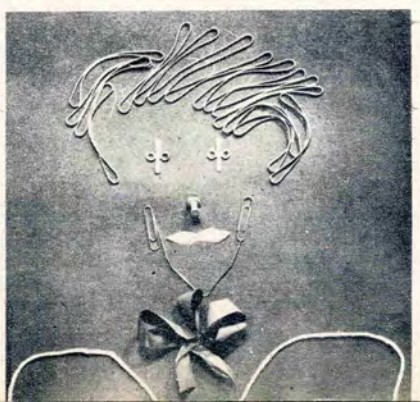
Gloomy Gus: every day is Blue Monday

The Boss has his eye on you!

Joe looks cute in his G.I. suit

Junior with his harmonica

She guards the inner sanctum



Been with the company 40 years

America's Famous Helicopters for Your Prize Collection

Official Scale Models Win Acclaim of Experts Everywhere for Authentic Detail!

HILLER HORNET $2.49
with official insignia in Army olive drab, Navy blue, and Civilian red.

THE PIASECKI $2.49
with official insignia in Army olive drab, Navy blue, Marine blue, Air Rescue Service gray, and Piasecki Workhorse silver.
With Pontoons $2.98

THE SIKORSKY $2.49
with official insignia in Army olive drab, Navy blue, Marine blue, Air Rescue Service gray, and Coast Guard yellow.
With Pontoons $2.98

So Real-looking You'll Think They're About to Take-off!

THE PIASECKI HUP $1.49
with official insignia in Navy blue, Marine blue, Army olive drab, and Air Force silver.

Now Own History-Making Helicopters!
Each model is precision molded, detail for detail, in sturdy polystyrene plastic. These easy-to-assemble kits include handsome display stand, detailed assembly instructions and fascinating history of the helicopter. Dramatic natural color action picture on box cover excellent for framing. They're real prizes for your plane collection.

AVAILABLE AT YOUR FAVORITE DEALER
and fine stores everywhere, or write direct to us. Enclose check or M.O. plus 25¢ for postage and handling. No C.O.D.s. Specify model and color.

HELICOPTER GUIDE by "Les" Morris

The only book of its kind! Written by one of America's first and foremost helicopter pilots. Tells you everything you want to know about helicopters. Gives detailed, easy-to-understand instructions and diagrams on how to fly a helicopter. Jam-packed with illustrations and facts.
$2.00 PER COPY
Add 10¢ for postage and handling.

Helicopters for Industry Inc. • 111 Cathedral Avenue, Hempstead, N. Y.

(*Continued from page 75*)

fallen. Or you will photo-blast the Golden Gate Bridge in San Francisco.

On completion of Basic you are awarded your commission and silver wings as Aircraft Observer. Then you may be assigned as a navigator or continue your training in Advanced—specializing as described earlier. The tour of actual duty is the same as for pilots—three years.

Application blanks for training as an Aviation Cadet may be obtained at any U.S. Air Force base; from any U. S. Air Force Aviation Cadet Procurement team; or by writing to the Chief of Staff, U.S. Air Force, Attention of Aviation Cadet Branch, Washington 25, D.C.

Under Control

(*Continued from page 11*)

Technical Dept. We have had requests from several readers for data on the use of the Simple-Single and Mini-Mac on the Ham 6 meter bands. We believe the latter especially should be fine for such use, and will dig out the dope, for presentation here later.

We have heard that several builders had trouble with the two-tube receiver we described here in the Dec. 1953 issue. Seems they would work fine for a time, with a new tube, but then would refuse to operate any further. Some notes on this type of receiver from John Worth might help to clear up this trouble. John feels it is due mainly to improper antenna coupling; he recommends the use of inductive coupling. Wind about three

(*Continued on page 84*)

ANOTHER ATWOOD 1st

The First and Only Complete Line of Small Model . . . .

OUTBOARD and INBOARD MARINE ENGINES

WATER COOLED • AIR COOLED

ATWOOD QUALITY AIRPLANE ENGINES

DRIVES ALL MODEL WATERCRAFT UP TO 30 m.p.h.

CADET $3.95

.049

F/F $4.75
U/C $4.50

TRIUMPH $18.00

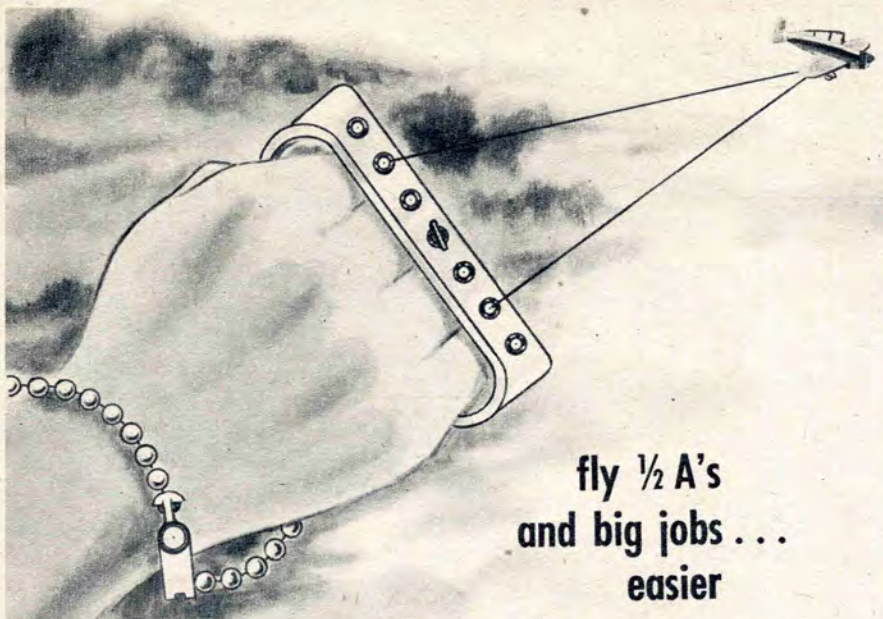
JUST LIKE THE BIG ONES . . . not toys. Precision built with finest materials.
AUTOMATICALLY WATER COOLED by ingenious propeller pickup system, even when boat is not in motion.
THE OUTBOARD ENGINE is adjustable for "circle travel" and "thrust angle" for easy mounting. Ready to hook on and go!

Now Anyone Can Run A Model Boat!

OUTBOARD
WATER COOL $9.95
AIR COOL $9.75

INBOARD
WATER COOL $5.75
AIR COOL $5.50

ATWOOD MOTORS
3716 Park Place, Montrose, Calif.



fly ½ A's
and big jobs . . .
easier

HANDY·REEL

with separable handle for maximum flight sensitivity and control

$2.95

REEL OUT — REMOVE HANDLE TO FLY . . . get the full feel of your ship; maneuver with thrilling sensitivity and control. Handy Reel takes all lines . . . will withstand pulls in excess of 100 lbs.

HANDY THONG Safety Accessory . . . adjustable; locks handle to wrist, avoids loss of ship or injury to spectators. Required by AMA for contest flying. .75

Conveniently stores the lines . . . connected and ready for flight

- *large diameter reel prevents kinking of line.*
- *durable high impact Styrene and metal construction — lasts a lifetime.*

Ask your dealer for Handy Products; if not in stock please give name of dealer and mail your check or money order to:

PRICE-DRISCOLL
CORPORATION
520 Fifth Avenue • New York 36, N. Y.

- DOPE CAN
- WESTERN ROUNDUP
- SOUTHERN SCENE

■ Did you get the word: National Modelplane Championships scheduled for Chicago at Glenview Naval Air Station July 27-Aug. 1. Sponsor, National Exchange Club. Details from Academy of Model Aeronautics, 1025 Connecticut Ave., N.W., Washington 6, D. C. Air Force's annual world-wide modelplane championships for A.F. personnel to be at Biggs AFB, El Paso, Tex., July 19-23. Winners usually go on to "civvie" Nats.

Good Clean Fun. So G. Washington threw a silver dollar across the Rappahannock River in Virginia. Why not fly a PAA-Load modelplane across carrying a silver dollar? Too easy, declared PAA's Dallas Sherman & George Gardner. Make it the Potomac, it's wider and that much wetter. "Tell you what we'll do," said Dallas. "We'll give everybody who makes it a silver dollar for every additional ounce he can load on his model Cargo Clipper plane and fly dry it between Hains Point (District of Columbia) and Bolling Air Force Base."

So the great race was on. America's most powerful midget engines and America's most expert designer-flyers (well, the cream of the Washington, D.C., crop, anyway) pitted against Pan-Am dollars. Result? Pan-Am—we're happy to report —ran out of dollars! Seven models spanned the 2,000 foot expanse of water. Washington's Rudy Aukschun garnered $19 for his 19-oz. load; William Nesbitt of Silver Spring, Md., flew his radio-controlled entry safely across bearing a silver buck, landed within 3 feet of a pre-designated spot, walked off with a Pan-Am Bulova wristwatch.

Among the judges: Paul Garber, curator of aeronautics for Smithsonian, Capt. Martha Washington, Air Force nurse.

Wants to Break the endurance record of 8 hrs., 31 minutes, 50 sec., set by

One of entries in Pan-Am's silver-dollars-across-the-Potomac weight-lifting trials on George Washington's Birthday. Rudy Aukschun, D.C. with 19 oz. cargo won, received $19.

HOBBY-MODEL WORLD

Sherman Holt. Can flyers spell one another? asks A. J. Potoin, 354 Poplar St., Sudbury, Ont. Holt had relief co-pilot, A. J. For official recognition you should contact Model Aeronautic Assoc. of Canada at 545 Josephine, Windsor, Ont.

The Flyers Klub of Bloomington, Ill., "does not recognize this record," referring to young Holt and his performance. "We feel that the only true record is of the self-sustained nature. This type of record would combine all the knowledge of flying with sportsmanship. A plane that could weight-lift its own fuel and plane weight and then fly to a new record is the only true endurance holder."

Modelers' Meetinghouse

Got a message you want to get across to other clubs, hobby fans? Want to find the source of some material, plans or pictures? Do you have a collection you'd like to pass on to some genuinely interested group or individual? Then this is your chance right here in this column. Address your request to "Modelers' Meetinghouse," c/o Air Trails HOBBIES For Young Men, 304 East 45th St., New York 17, N. Y. We'll try to run your plea, request or query for a couple of issues, but guarantee nothing. Please—no commercial announcements, fellows.

Hez 13 and would like pen pals interested in air progress. His collection is mostly pictures from books and magazines. Mickey Closs, Gen. Del., Kirkland Lake, Ontario, Can.

Anxious to contact American pen pals interested in Australian aeromodeling. John M. Triplett, Whitton St., Hamilton Hill, Western Australia.

Needs 3-views and data on Germany's Me-262 twin-jet interceptor of World War II. Stephen Muth, 205-16-34 Ave., Bayside 61, N. Y.

Wants pen pal. Dennis Thomas, Box 282, Mtn. Home, Idaho.

Charles Hand, formerly of 205 Acadia Terrace, Fairfield, Fla.—where are you, boy? "ATH" has a check for you.

Wants pen pals. 34 years with telegraph co. Towline glider fan. Gustav Feldmann, 22 Schneidhainerstr., Frankfurt/Main, Germany.

Wants hints on flying 4-engine control line jobs. David Ma, Hong Kong University, Hong Kong, B.C.C.

Free Scale Model Plans. Navy's newest gratis drawings (yours for the asking) are Lockheed P2V-5 Neptune, U. S. Navy Patrol bomber, and SBD Dauntless Navy-Douglas dive bomber. To get a set, drop a card or letter to Lt. Cmdr. R. W. Lazenby, USN, Office of Information, Room 4D718, Pentagon Building, Department of the Navy, Washington 25, D. C.

Wants control line-minded pen pals. Robert St. John, RR 10, Box 259-P, Indianapolis, Ind.

Private Carrier. Want to tell you about the Long Beach, Calif., Flying Esquires, a control line modelplane group interested in the Navy's model carrier event. After much experimenting with makeshift carrier arrangements, the LBFE's decided to construct a model deck similar to those the Navy uses at big meets. Through the cooperation of Jiggs Hobbies and Crafts Shop, the project was completed last winter.

That photo below was taken at the L.B. Municipal airport which offers control line enthusiasts what they term "excellent flying facilities." This was during commissioning ceremonies conducted by Captain J. B. Paschal, CO of the Los Alamitos Naval Air Station. "CVM Flying Esquire" is now the official name of this model carrier. LB's FE's are very proud of their efforts, as well they might be, since that club possesses the only privately owned model carrier in the country (Plymouth's is in mothballs now that the Plymouth International meet has been abandoned).

J. H. Ferry, publicity secretary of the Flying Esquires, reports further success with the carrier. L. B. Chamber of Commerce asked the club to put on a complete C/L exhibition, including carrier, for "Wings Over the Nation" Day celebration at the Municipal air field. Participating also were the Navy and Air Force. About 18,000 saw the show and were most enthusiastic over the model flying exhibition. As a result, the Esquires have been informed its model carrier will be in the State Championship meet (see Hobby Contest Calendar).

Western Roundup. Lloyd Licher writes that the 1954 National Soaring Contest is to be held at Elsinore in July and August, which will undoubtedly be the same dates as the Nats, so—with a proposed model contest to be held on Saturday and Sunday, it looks like the West Coast will have something to do.

The S.S.A. is endeavoring to help sponsor the Nordic eliminations and possibly help the team, but about all

(*Continued on page* 93)

Bob Ritz, Flying Esquires (Long Beach, Cal.) pres., at U/C carrier "launching"; Betty Baize, christener; Capt. Paschal, CO Los Alamitos.

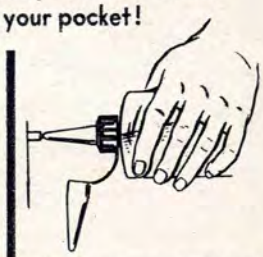
HANDY BOY

PRESSURE FILLS ALL TANKS AND FILTERS AS YOU FUEL!

$1.25

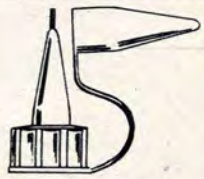
Squeeze... and it fuels • Gas is always clean — Supply always visible • Holds 4 oz. • fits your pocket!

Unbreakable, fuel-proof, compact squeeze-type plastic container and metal-tipped filling head fuels all tanks.



Special built-in strainer filters out dirt and impurities — assures entry of clean gas into tank.

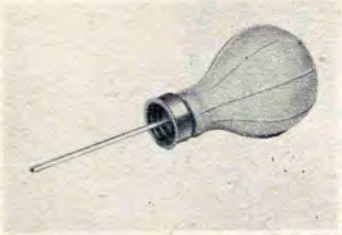
Pressure-cap for sealing Handy Boy against evaporation loss or spillage; permanently attached.



Ask your dealer for Handy Products; if not in stock please give name of dealer and mail your check or money order to:

PRICE-DRISCOLL
CORPORATION
520 Fifth Avenue • New York 36, N. Y.

NEW ACCESSORIES FOR FLYING FUN!



Rubber Squeeze Bulb PUMP

2 oz. 59c 4 oz. 79c

Now you can throw away all your makeshift pumps . . . here is the easiest working pump ever made. Positive acting. Foolproof. Just squeeze the bulb and the pump fills quickly, easily. Heavy rubber bulb. Dent-proof polyethylene screw cap fits any standard fuel can. Corrosion-resistant tubing.

New, Improved

INSTANT USE FLEXIBLE LINES

Dia.	Length	List
.008	2-26'	.85
.012	2-35'	1.25
.015	2-52'	1.85
.015	2-60'	2.00
.018	2-70'	2.00
.018	2-80'	2.30
.021	2-70'	2.50

Invisible HINGES

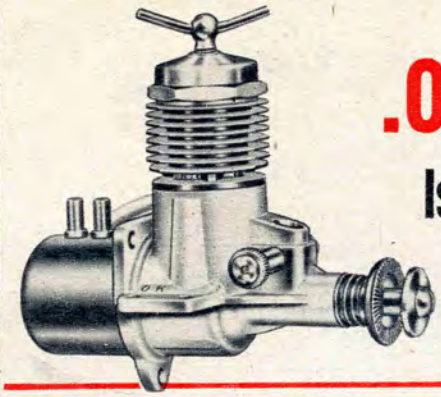
.15

These easy-to-use Nylon hinges will not bend out of shape. Will not slip out of position. Enough for one plane in each package.

PYLON BRAND

Sullivan Products

214 W. DAUPHIN STREET PHILADELPHIA 2, PA.



.049 cu. in. Cub Is Powerful Compression Ignition Powerplant

■ Herkimer Tool and Model Works' new C.I. Cub is an adaptation of their popular .049B glow plug engine. In fact, many of the component parts of the glow version are incorporated in the "diesel."

Until American inventive genius went to work on compression ignition engines, this type of powerplant was strictly a European development. First came the American glow plug powerplants, and now the really "hot" diesels.

Although the glow plug has its advantages, there are still some drawbacks. Booster batteries for starting purposes are still necessary. The dope and wax removing properties of glow fuels are still with us, even though fuel proofing finishes have gone a long way in minimizing this disadvantage.

The test results of the .049 Cub C.I. (diesel) engine were startling, to say the least. It outperforms its glow brother in both power and rpm. A 6½/3 wood propeller is supplied with the diesel as against a 5½/4 plastic propeller supplied with the glow.

In the rpm department with the larger propeller, the diesel was turning up just under 14,000. This is an increase of approximately 500 over the .049B glow engine tested previously with the smaller prop! When testing both versions with the same 6½/3 prop, the diesel ran approximately 2,000 rpm faster!

Workmanship is up to the high standards of all Cub engines. Two important design features employed in the .074 Cub diesel have been incorporated in the new .049. These are the shock-absorbing spring steel pad between the compression screw and the contra piston and the design of the contra piston itself. The spring pad, capable of flexing, absorbs most of the severe strain normally imposed upon the connecting rod, wristpin and crankshaft of C.I. engines.

The contra piston is designed with a lip at its upper rim. This lip bears

The Cameron .09 Marine Engine was developed especially for powering model boats. It is available in a two-speed model in addition to the conventional single-speed model. The two-speed (double jet model) gives the user of radio control models the added advantage of being able to change the speed of the engine while the boat is in operation. The regular single-speed engine is also ideal for use in powering radio control boats where the two-speed feature is not especially preferred.

The Cameron .09 Special Marine Engine can be used in powering model boats of almost any size. In testing during its development, a row boat carrying four people was actually towed by a small radio controlled boat powered by a Cameron .09 Marine Engine.

The engine is of very rugged construction with extremely thick wall sections throughout to provide for even heat transfer and dissipation to eliminate all possibility of uneven expansion or thermal distortion during operation. It is a lapped piston type engine having one-half inch bore and one-half inch stroke, and is precision built, using the best materials throughout. All working parts are heat treated and micro-finished for long trouble-free service.

Water cooling is provided for on both models of the Cameron .09 Special Marine Engine to eliminate all possibility of overheating of the engine which would otherwise cause faulty operation due to improper carburetion. This cooling feature makes it possible to install and operate the engine deep in the hull or in cabins of boats where engines would not otherwise operate properly due to an insufficient stream of air for cooling. Engine runs of any time duration are also made possible by this special cooling feature which is not found in any other model engine.

Water cooling of engine is not necessary when engine is operated where sufficient air is available for air cooling, as engine is adequately finned for proper air cooling under all normal circumstances.

MANUFACTURED BY
CAMERON PRECISION ENGINEERING CO.
CHINO, CALIFORNIA

SHIP CATALOG *50¢

1000 FITTINGS
POLK'S
Helpful hints on building detailed ship models. Fully illustrated catalog-manual, 169 pgs.
HO Catalog-Manual 148 pgs. *50c
Tinplate, HO, S, O 148 pgs. *50c
Leathercraft Catalog 10c
Soldiers *25c

*Contains Money-Back Merchandise Coupon.
All catalogs fully illustrated, instructive. A Must for Every Model Hobbyist!

POLK'S DEPT. H-54 314 FIFTH AVENUE NEW YORK 1, N. Y.

Acme Battery Cases

INSULATED TERMINALS FOR EACH CELL

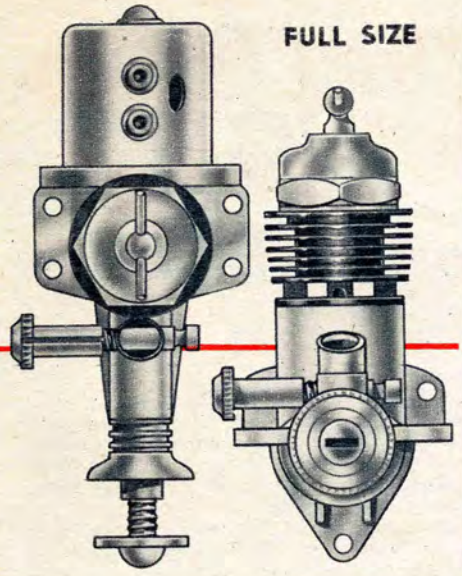
#8—for 4 pencells

#10—for 2 med. cells

#1 for 1 miniature pencell	.25
#2 for 2 miniature pencells	.40
#3 for 3 miniature pencells	.60
#4 for 4 miniature pencells	.75
#5 for 1 regular pencell	.25
#6 for 2 regular pencells	.40
#7 for 3 regular pencells	.60
#8 for 4 regular pencells	.75
#9 for 1 size C med. cell	.25
#10 for 2 size C med. cells	.40
#11 for 1 size D large cell	.25
#12 for 2 size D large cells	.40
#13 for 1-22½V.	.30
#14 for 2-22½V.	.50
#15 for 3-22½V.	.85
#13, 14 & 15 are for batteries such as Burgess U-15 and other makes the same size.	
#16 for 1 Burgess 3V. 2Z2PI Pack	.35

All Acme battery cases may be wired in series, parallel or both. If your dealer cannot supply—order direct.

ACME MODEL ENGINEERING CO.
8120—7th AVE., RM. 304, BROOKLYN 9, N. Y.



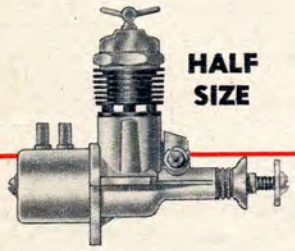
FULL SIZE

against the cylinder barrel when maximum compression is reached, thus acting as a safety device. It also eliminates the possibility of overloading the reciprocating parts above the safety point. A perfect seal of the contra piston, always a problem with variable compression heads, has been achieved through the use of a plastic sealing ring, fitted to the contra piston similarly to the cast-iron piston rings that we are more familiar with. These two important features alone should mean long, trouble-free use.

Apart from the design features mentioned, the diesel incorporates typical Cub construction. The die-cast aluminum crankcase may be mounted either beam or radial. Crankshaft is steel, hardened and ground. An extended aluminum drive washer is press-fitted as is a small projecting insert for propeller centering. Connecting rod is steel and of adequate diameter to stand up under the added compression ignition loads.

Wristpin is steel and press-fitted to the hardened and ground steel piston. The cylinder is machined from steel and threads into the crankcase. Porting arrangement is typical of all Cub engines. The aluminum head is fitted with a fiber washer swaged in place. This washer, having sufficient friction qualities, keeps the compression adjusting screw from backing off when running.

Starting compression ignition engines differs from glow engines in that the correct compression adjustment screw setting takes precedence over the needle valve adjustment. Once the correct setting is attained and noted, starting is practically instantaneous, whether the engine is hot or cold. Needle valve adjustment for starting is not critical as long as it's slightly rich.



HALF SIZE

NOW!

FOR THE FIRST TIME—

You've been asking for it

Here it is . . . . .

GUIDED MISSILES

NIKE Guided Missile illustrated above is one of the Kits you may order.

Easy to Build—All Supplies Included

HOW TO ORDER:

Cut along Dotted line.

Send Payment In Full, No Stamps, No C. O. D.'s

Indicate Selection Of Guided Missile Kits You Wish Sent, Below.

NIKE Guided Missile (Army) ☐ - $1.00
TERRIER Guided Missile (Navy) ☐ - $1.00
MATADOR Guide Missile (Air Force) ☐ $1.00
BOMARC Guided Missile ☐ - - $1.00
REGULUS Guided Missile ☐ - - $1.00
V2-Wac Corporal (Alt. Record 250 miles up) ☐ - - - - $1.00
FIREBEE Unique Target Drone ☐ - $1.00
AEROBEE Rocket (High Alt. Research) ☐ $1.00
VON BRAUN'S Rocket Ship Proposal for leaving the earth, scale model ☐ $1.00

NOTE: Any five of above for $4.00. If ordering less than 2 models include 25 cents for handling.

SOUTH BEND HOBBY CORPORATION

P. O. Box 632 South Bend, Indiana

Please rush me the models checked above. (Please Print)

Name _____

Street Address _____ Amount Enclosed _____

City _____ Zone _____ State _____

STRATO STAR
TWO KITES PER BOX!
45¢
AT YOUR DEALER
By mail add 10¢
* BALSA WOOD STICKS around all edges too!
* PLASTIC COVERING assorted colors
* FULL SIZE PLANS * TAIL INCLUDED
Sticks Precut to Exact Length and Angle
ROBEY SPECIALTIES
2836 Westbrook Ave. Indianapolis 21, Ind.

TRUE PROPORTIONAL CONTROL

PRC-100

Self Contained Power Supply. FINEST MATERIAL and WORKMANSHIP. Designed for years of Dependable Service. 8' Rubber Cable Supplied

GUARANTEED

$19.95

At your dealers or write:

CURTIS MACHINE PRODUCTS CO.

2100 Richmond Terrace S. I. 2, N. Y.

START RIGHT!

with the JETSTER

THE *ONE* OUTSTANDING CONTROL-LINE TRAINER

$3.50

This is the trainer that makes all others obsolete! Only the Jetster has a one-piece, SOLID, pre-shaped SYMMETRICAL wing. This symmetrical airfoil enables the jetster to fly inverted . . . perform nearly all maneuvers. Master the Jetster and you're ready for the most advanced models. Completely preshaped of hard balsa and plywood. Wheels included. Ready to fly in two hours time. Get started . . . get the Jetster at your dealers today!

Wingspan 30" Wing area 150 sq." Engine "19" to "29"

Advanced Pilots . . . get the WOODCHOPPER

This advanced model is setting new standards in stunt combat competition. Natural balance, symmetrical design, maximum lift and maneuverability, instant response.

Wingspan 32" Wing area 220 sq." Engine "19" to "35"

$2.95

Amcraft

2 BARRINGER AVENUE, SCHENECTADY, NEW YORK

for consistent HIGH QUALITY

Tornado Propellers

Radio Control Propeller
(recommendations)

Engines	First Flights and Low Altitude	High Altitude and Maneuvers
All .049's	7 in. dia. 2 in. pitch	7 in. dia. 3 in. pitch
Cub .074	8 " " 3 " "	8 " " 3 " "
.09's	10 " " 2 " "	9 " " 3 " "
.14's and .15's	10 " " 3 " "	10 " " 4 " "
McCoy .19	11 " " 3 " "	10 " " 4 " "
Cameron .19	11 " " 3 " "	11 " " 4 " "
K&B .19	12 " " 3 " "	11 " " 4 " "
Fox .19	12 " " 3 " "	11 " " 4 " "
K&B .29	12 " " 3 " "	12 " " 4 " "
Fox .29	12 " " 3 " "	12 " " 4 " "
McCoy .29	12 " " 3 " "	12 " " 4 " "

R. C. Propellers

10 in. dia. 2-3-4 in. pitch—35c ea.
11 and 12 in. dia. 3-4-5-6 in. pitch—45c ea.

Plasticote Propellers

5" and 6 in. dia.—15c ea. 7 in. dia.—20c ea.
8 and 9 in. dia.—25c ea. 10 in. dia.—30c ea.

For the STUNT FLYER

The new 10" dia. Plasticote Propellers are now available at 30c ea. in 5 and 6 in. pitch. On all the .29's use a 10-5, on the .32 and .35 a 10-6. Forster 29 and 31, McCoy 29, do very well on the 10-5. The efficiency of the Plasticote propellers run up to 95%, and it may be advantageous to try a 10-5 instead of a 10-6.

RADIO CONTROL NOTES

When flying R. C. it is necessary to reduce venturi opening from 25 to 50% on almost all engines. Large props slow your engine R.P.M., reducing suction. The model does not fly level at all times . . . dives and stalls are encountered changing the fuel force. Plug the venturi opening to such an extent that you get the power you want from your engine. Too much speed in R.C. can be disastrous.

GRISH BROS.
St. John 1, Indiana

(*Continued from page 79*)

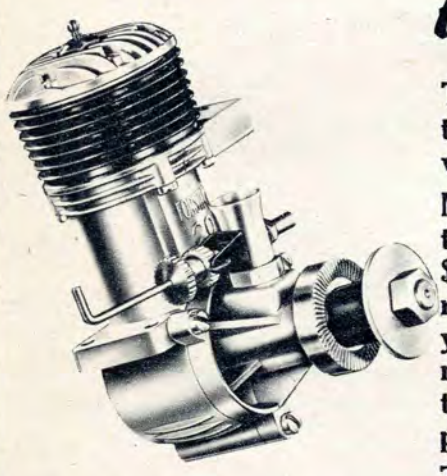
turns of Number 22 insulated hookup wire around the center of the tuning coil form, and connect one end to B minus and the other to a 15-20" long antenna. The new coupling coil is then slid back and forth on the antenna coil till the point of best operation is attained, when it may be anchored by a drop of cement. John feels that many builders use too high a value of inductance for the RF choke, which he finds should be around 10 microhenries. A form 3/16" x ¾" wound full of #34 or 36 enamel wire is about right.

Dick Schumacher has been using the Babcock BCR-3 receiver, and has some useful suggestions relative to lightweight battery supplies, when the receiver is installed in small planes. He notes that four pencells in parallel will give quite good life, since the set will work at lower A voltage than many other R/C receivers; they can be used until voltage has dropped to 1.2 V. Three midget 22½ V. B. batteries, such as Everyready 412, can be used in series, on those sets that are fitted with 10,000 ohm relays.

If you have a set with the 5000 ohm Terado relay, a slight modification is needed; remove resistor R12—it's the high voltage on the 3V4—and connect socket terminals 2 and 3 together. This sets the tube up as a triode. In either case, the set will show an idling current of about 1.2 ma., jumping to 6 ma. on signal. 4.8 ma. will go through the relay. The B battery should be discarded when voltage under load drops to 54 V. This battery supply has been found to allow about 20 5-minute flights. Though on-signal current of this receiver is rather high, idling current is no greater

the Best Deal Yet!

top money for your old engine!



MODEL F-29 or F-31
$11.20

To clear the flying fields of worn out, balky old engines—to give thousands of modelers a fresh start with a top quality engine, we make this sensational offer:

Mail your old engine to us, no matter what make, size or condition, even though some parts are missing! We will allow you $5.00 for it in trade towards a brand new FORSTER front rotary valve engine. Your old engine and only $6.20 will bring you the latest and best model F-29 or F-31 FORSTER engine, made by the oldest established model engine manufacturer in the U.S.A. and known the world over for outstanding precision, performance and fuel economy.

This is a limited offer, good at the factory only! Mail us your old engine today. The new engine of your choice will be on its way to you promptly. Write us for free descriptive literature.

it's trade-in time for a better deal!

YOUR ENGINE IS WORTH MORE ON A NEW "FORSTER"—NOW!
FORSTER BROTHERS 8 E. LANARK AVE., LANARK, ILL.

than that of most gas tube sets, and as Schuey notes, "We are not using as much control time on the escapement as we previously thought . . ."

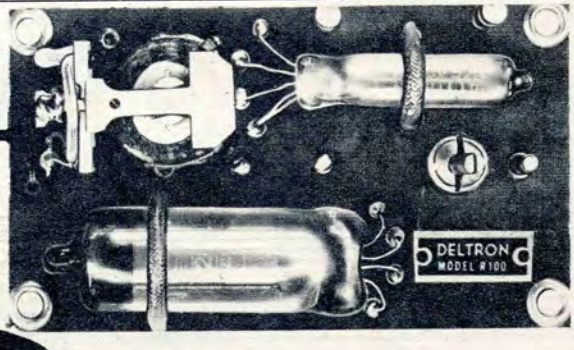
Commercial News. Special servo unit by Bonner Specialties (2900 Tilden Ave., Los Angeles'64, Calif.) is for use with Babcock 3-channel A.F. tone receiver. As so used servo is employed on elevator, is non-centering and has mechanical limit-stops. Bonner will continue Standard escapement, Compound and Motor Control units.

Gyro Electronics Co. (325 Canal St., New York 13, N. Y.) have supply of new power transformers used in PE-157 units—basis of Mac II, for $3.50 each. These permit very efficient power supply to work from 2 V. storage cell. Concern will drop previous 2 V. power supply, offer new one built around this transformer, for $6.95 in kit form, or $10.95 assembled and wired. For those already having a dry battery-powered transmitter, Gyro offers 12 x 7 x 6" metal case with handle, plus vibrator power supply kit, for $9.95. They also have compact automatic dry battery "charger," with full instructions on rejuvenating various types and sizes of cells and batteries, for $6.50, ready to use.

Need a good heavy duty B battery for testing transmitters, or even for field use? Eveready No. 487 is a good choice; measures 2 x 5 x 7" high, weighs 4 lbs. 2 oz. Will give almost three times the life you can get from more familiar No. 482, costs only about a third more than 482.

Multi-Servo, sold by deBolt Model Eng. Co. (Williamsville, N. Y.) in four types, from $10.95 to $14.95. Differ as to number of control positions and whether they are self-neutralizing. Model 2PN, $11.95, gives two control positions and automatic neutral, is ideal for rudder operation. These servos might be visualized as electric-motor driven escapements—have a great deal of power, weigh 1½ oz. each. Said to give 5000 operations on two pencells.

R-100 RECEIVER
Shown actual size:
3"x1⅝"
Weighs less than 2 oz.
including plug



NEW DELTRON has tremendous sensitivity!

NEW CIRCUIT gives safe control at great distances. Smaller. Lighter. Rugged-built for long life.

TWIN-TUBE RECEIVER idles at 0.5 mils, which is the first stage. When the transmitter is keyed, the current in the second stage, through the relay, jumps from 0. to 2.7 mils—3-times current required.

EASIEST TUNING. only one adjustment. No meters needed!

COMPLETE, FULLY-ASSEMBLED of new top quality components and thoroughly tested. **$24.95**

DELTRON TRANSMITTER T-100 Lightweight, hand-held unit is only 3"x5"x7". Long-range, 3-watts plus! Has telescopic antenna, micro-action keying button, radiation indicator light. Rugged. Dependable. Complete with tube and crystal **$29.95** (less batteries)

Write Today. 24-hour Service on All Orders

TERMS: Cash with order or ⅓ with order, balance COD
NOTE: On prepaid orders, we pay freight!

DELTRON CO. 5205 EAST SECOND STREET LONG BEACH 3 CALIFORNIA

THIMBLE-DROME

SPACE BUG Jr.

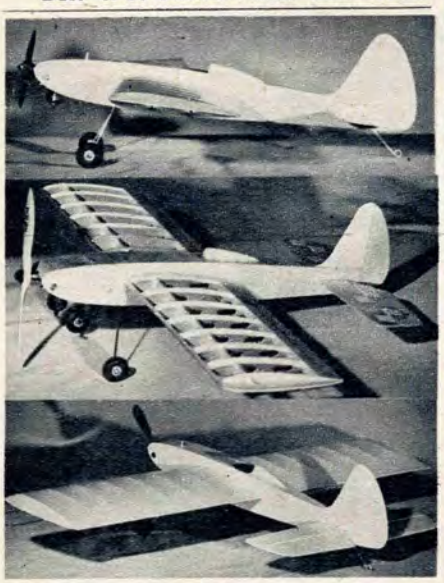
$3.95

Performance up to 14,000 RPM. All that any pleasure flier or beginner requires! Little brother of National Champion Space Bug .049—with famous Thimble-Drome easy starting and efficient operation. Flies in any position, upright or inverted, right or left. Positively no break-in required. Needle valve away from exhaust & prop. A sensational ½A engine value.

AT ALL HOBBY DEALERS

L. M. COX Mfg. Co., Inc.

Box 476, Santa Ana, California



Symetri-Flite Design - - - All Flight Surfaces Symmetrical to thrust line for all position Flying Perfection

- Automatic Alignment of Tank to Needle Valve
- Built-up Sheet Trailing Edge for Light Warp-proof Wing Construction
- Full Size Plans
- Sharp, Exact, Die Cutting
- Premium Grade Balsa
- Complete Metal Hardware, Formed Landing Gear

Engines:	.049 Glow or Diesel
Wing Area:	107 Sq. In.
Wing Span:	24 Inches
Wing Loading:	.042 Oz. Per Sq. In.
Weight:	4.5 Oz.

½ A SNAPPER

$2.25 at Your Dealer

Southwestern Model Mfrs.
P. O. Box 571-W
W. Tulsa 7, Okla.

■ Ever since I had the pleasure of watching the old Baby Bowlus sailplane perform at a local airshow, the pod and boom type model has been my favorite type of free flight model.

Pictured is the smallest version of the many I have built over a period of years. It is powered by an Infant .020 and weighs in under 3 ounces. Due to its exceptionally clean design with a minimum of fuselage drag, it performs well in all types of weather.

The pod was carved from soft balsa blocks, hollowed out to reduce weight. The boom is 1/16" sheet balsa, bent to form a hollow tube, with a saddle for stabilizer mounting. 1/20" sheet tail surfaces are tip-up fuse operated.—*Aubrey Kochman*

WIN $25.00 WITH "MY FAVORITE MODEL"

Send photo of yourself & model plus all details to "My Favorite Model" contest, c/o Air Trails HOBBIES For Young Men.

TIRED OF TRYING?

EXPERIENCE 22 YEARS COUNTS

Try TROST

In addition to leading lines of Model Planes and Trains, TROST stocks many Imported toys, Leather Handicraft, Woodworking, Bead and Shell craft, Woodburning, and many other kinds of hobbycraft. Dealers write for complete A to Z list.

TROST

Modelcraft and Hobbies

3140 W. 63rd St. Chicago 29

PLANES-TRAINS-SHIPS-PARTS-SUPPLIES

BUILD and FLY YOUR OWN PLANE

"Flying Flea" (Pou du Ciel 290) which does not Spin, or stall; the most original, safest and simplest airplane to fly. Wingspan 18'. Take-off 150 ft. Cruising speed 85 mph. Range 300 miles.

Latest construction blueprints and instructions $6.95.

Album with pictures of the Flying Flea, $2, or both $8.50. No C.O.D.'s Please!

VEMALINE PRODUCTS COMPANY

P.O. Box 222W Hawthorne 2, N. J.

CLASSIFIED ADVERTISING

Everyone reads the classified. Here is a section hand-tailored for anyone with something to buy or sell.

RATES: Minimum 14 words for only 20c per word. Send remittance with ad to:

Air Trails HOBBIES For Young Men
575 Madison Avenue
New York 22, New York

PHOTOGRAPHS

PHOTOS OF AIRCRAFT from Wright biplane to latest jet. 250,000 photos in stock. Also old aviation books. Send dollar bill for six real photographs of the latest jets, plus the 52 page illustrated catalogue. Aeroplane Photo Supply, Box 195 Toronto, CANADA.

Aircraft Photos—glossy photos 5 in set 25c. sample and list 10c. 5 x 7 photo captured Russian MIG-15, 35c. Harry McIntyre, Box 423, Ocean City, N. J.

SPECIAL OFFERS

NO MAGIC—CRYSTAL BALL—or BALLYHOO—our customers will back us up. If you are seeking a solution to lower prices and a source of services—try us—gamble 3c and find out. Precision Aero Research, 2020 Ohio, Quincy, Ill.

Order your new motors from us and deduct 20% off the regular price. Buffalo Model Specialty, Box 4, Station B, Buffalo, New York.

PLANS for 6 inch diameter pulse jet for helicopter. $4.00. Dale Wolford, Box 387, Sullivan, Ohio.

MUST CLOSE OUT! Under military orders. Radio Control, engines, planes, supplies, everything. Own private hobby stock. Send for list (free). Demitz, AFSC, Norfolk 11, Va.

MODEL SUPPLIES & EQUIPMENT

KITS AND SUPPLIES. Full line. Planes, boats, cars and other hobbies. Send 10c for illustrated catalog. Howard Company, 141-45 71st Ave., Flushing 67, N. Y.

CP DISTRIBUTORS, devoted to reducing cost of model supplies, invites all model builders to get acquainted with us. Below are excerpts from our catalog: Regular dope, clear, 80c pint; in colors $1.25 pint; thinner 80c pint. Butyrate hot fuel proof dope, clear, 95c pint; in colors $1.35 pint; thinner 85c pint. Finest quality imported silk (not surplus). 0-4 yds. 90c yd., 5-14 yds. 85c yd., over 15 yds. 75c yd. White only, any continuous length, 36" wide. Sigma 4F—$3.95 (this month only). Order from this ad and receive free bonus gift. Please remit. Postage prepaid; liquids sent collect. Send for free catalog. CP Distributors, Box 4094, Los Angeles 24, Calif.

RADIO CONTROL

Sell ½ price, Citizens 465 transmitter, 3 receivers, latest factory improvements. Dr. L. W. Weber, 303 National Reserve Bldg., Topeka, Kansas.

YOU ASKED FOR IT. HERE IT IS—"The Beginner's Radio Control Manual." A book produced expressly for those who desire knowledge of the basic fundamentals necessary for successful R/C activity. Truly a one volume training course in R/C with two full chapters devoted to the construction and operation of 27.255 megacycle transmitter and receiver. First of a series of publications by Scientific Hobbies Co., P.O. Box 7334, Chicago 80, Illinois. Price $1.15 postpaid.

A postcard sent to us keeps you informed on (or of) our special products and better buys. Write today to: Rite-Control, Box 37 Williamsburg, Brooklyn 11, N. Y.

WORK BENCHES

NEWEST, SPACE-SAVING WORKBENCH, 48" x 24" x 33", completely equipped, shipped FOB knocked down, minutes assembled, only $9.95. Riolemair, Palatka, Florida.

FOR SALE

COMPLETE, READY TO FLY Radio Controlled airplane, 6 foot Kenhi Buzzer'd, Babcock radio receiver and transmitter, Fox "19" engine, Bonner compound escapement, Nylon covering, two color 8 color fuel proof finish. Completely flight tested. Write for particulars. Redibilt Models, P.O. Box 585, Saugus, Calif.

WANTED

WANT TO BUY two Orwick 64 engines with ignition assembly, preferably new; will accept used ones in excellent condition. Dennis Hobby Shop, 532 South Patterson, Valdosta, Georgia.

Hobby Club Emblems

Oklahoma City
Model Aviation Club

Richmond, N. Y.
Model Flying Club

Bucks County, Pa.
Federation of
Model Clubs

Bridgeport, Conn.
Aeronuts

Model Wings
Pittsburgh, Pa.

Let's see your club insignia; let's have info on your group. "ATH" will pay $10 for each emblem and club story presented.

HOW TO HAVE MORE FUN IN YOUR SPARE TIME

Ideal MODELS

IT'S EASY TO BUILD
This 20½" AUTHENTIC SHIP MODEL
WITH CARVED WOOD HULL

No. 324 The UNITED STATES
Only $6.50

FASTEST ATLANTIC OCEAN LINER
Completely prefabricated with
170 cast metal parts. Scaled
1/48" to the Foot.
SEE YOUR DEALER TODAY

CATALOG 10¢

IDEAL MODELS
24-26 WEST 19th ST., NEW YORK 11, N. Y.

SNIFFER

½ A FREE FLIGHT

KIT ONLY $1.95

COMPLETELY DIE CUT

MIDWEST PRODUCTS CO.
6005 East Dunes Highway Gary, Ind.

the ultimate in fine model design

Monarch

FOR ENGINES — .19 to .35
WINGSPAN — 30½ inches

5.95 at your dealer
by mail add 30¢

GOOD NEWS

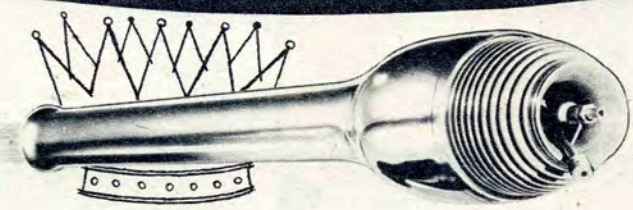
A stunning new model — perfect for all sport flying and team racing. Handsome, sleek, and trim in every line. Nothing finer exists — here is design and prefabrication at MONARCH'S best; assuring quick and easy assembly. Contents are de luxe — formed aluminum struts, bubble canopy, rubber wheels, and much more. See this beauty now, and remember, GOOD NEWS TRAVELS FAST.

One of MONARCH'S famed "SPITTIN' IMAGE" models—(others being Curtiss P-40F and Spitfire). Recognized as the greatest half "A" control line scale models ever. Superb design and amazing Pre-Fabrication make each a masterpiece. Includes spinner, and every luxurious extra. Wingspan, 20 inches.

3.95 at your dealer
by mail add 30¢

MONARCH MODEL AIRCRAFT CO. Inc.
Brooklyn 33, N. Y.

DYNA-JET is KING!



for plane, car and boat model propulsion
the Dyna-Jet "Red Head" Miniature Gasoline Engine can't be beat!

179.03 MPH—Dyna-Jet ticked off a zooming 179.03 mph to win the official AMA world speed record!

HOLDS ALL RECORDS—Dyna-Jet holds all world records for jet models.

DEVELOPS 4¼ LB. THRUST—Guaranteed to develop at least 4¼ lb. static thrust, the equivalent of more than 2 HP exerted at 125 MPH with 70% propeller efficiency.

COMPACT—Maximum diameter, 2½". Length, 21½". Weight, only 16 ounces!

MONEY-SAVER—No maintenance expenses of bearings, pistons and props that wear out or break and require replacement.

HIGH RESALE VALUE—Runs like new after years of use . . . resale value is always high.

FAST STARTING—Dyna-Jet is the fastest, easiest starting Pulse Jet engine ever built.

GUARANTEED
1. To start easily with hand tire pump.
2. To equal or exceed advertised power.
3. Against defective material or workmanship.

Power your model with the undisputed king of all miniature jet engines—DYNA-JET! $35.00 at your dealer's; or, if he can't supply, order direct.

Curtis Dyna Products Division
AUTOMOTIVE DEVICES, INC.
P.O. Box 232 • Bedford, Indiana

At Your Comet Dealers Now!

Kit No. SP-1

The COMET LOCKHEED Starfire F94-C

$2.49

Newest of the Comet Jet Fighters—A Flying Scale Model Designed for JETEX POWER

* 10 Formed Plastic Parts; Finished Bubble Canopy
* Lightweight Silkspan Covering
* Retractable Nose and Main Landing Gears
* E-Z-open Jet Motor Access Hatch
—and many other welcome features

Wingspan (with wing tanks) 23⅜"—length 25". Latest fighter ordered into production for our Air Force. Amazingly realistic model. Fuselage designed to take a Jetex 150 engine and Jetex augmenter tube for extra power. Plan provides flying instructions.

Comet Cement—Big Tube—10c

AT YOUR DEALERS
If no dealer, write directly to Dept. 35
COMET MODEL HOBBYCRAFT, INC.
501 WEST 35th STREET, CHICAGO 16, ILLINOIS

francisco Racing Fuels*

HAVE WON MORE WORLD SPEED RECORDS
AND MORE FIRST PLACES IN SPEED CONTESTS
THAN ALL OTHER PREPARED FUELS COMBINED

THE ONLY FUELS
★ With Volatane Control
★ Processed to Avoid Spoilage
★ Truly Acclimatized
★ Rust and Acid-Proofed
★ Based on 30 Years Experience

POWERMIST • SPITFIRE
BLUEBLAZER • TOPSOL
Degummed Castor Oil Concentrates

*FUEL OF THE CHAMPIONS
3015 Glendale Bl., Los Angeles 39, Cal.

THERE'S MONEY IN MAGIC!

■ Here are two interesting puzzlers for your parlor legerdemain. Top: The lady has the problem of dividing the cake into eight equal portions with only three cuts of the knife. Left: How strong is your buck? Can you break a pencil with it? . . . Stumped? All right, here's how. To divide the cake into eight equal portions with three cuts of the knife, make first two quarter-cuts, place all quarters atop one another, then run the knife through the whole collection. To break the pencil with the dollar bill, a bit of acting is required. Fold the bill twice, lengthwise, swish it through the air to test its presumable strength and with rapid blow hit the pencil firmly held in your partner's hands—it will break in two. Note: Your finger hidden behind or between folds of the bill does the breaking!

What's Your Favorite Trick? Cash Prizes!

Ever notice how there's always one personality lad in any crowd at a school talent show, college get-together, civic or service gathering? And the one guy we've always admired is the fellow who stops the show—casually—with his bag of tricks. So we're asking the readers to send in their favorite original tricks. Air Trails HOBBIES will pay $25.00 for each one illustrated here. All you have to do is furnish us with a description of your favorite feat; include rough diagrams or sketches if such are required. Send to: "There's Money in Magic" Dept., c/o Air Trails HOBBIES For Young Men, 304 East 45th St., New York 17, N. Y.

HOBBY CALENDAR

List your hobby club's public shows here! Advise Air Trails not less than 90 days in advance. Give telephone of contact man if possible.
Address of contact man is in the same city as site of event unless otherwise specified.

SO. CALIF.—April 11. F.A.S.T. Club's air-model team races. Keith Storey, 8509 Higuera St., Culver City.

TEXAS.—April 21-24. Student Paper Competition, Texas Section, Institute of the Aeronautical Sciences. M. Mitrovich, Des. Proj. Eng., Development Group, Chance Vought Aircraft, Box 5907, Dallas.

ILL.—Belleville, April 25. Midwest Miniature Race Car Society meet. Carl Noward, 1384 Berdan Ave., Toledo, Ohio.

CALIF.—San Diego, April 25. Uptown Exchange Club, S.D. Modelers air-model meet. G. G. Wagner, Sr., 6851 Newbold Ct.

KOREA—Seoul, late April, early May. Scientific Work Exhibit at Seoul Nat. University. R/C models wanted. Chul Park, Dept. Aeronautics, College of Engineering, Seoul Nat. U.

CALIF.—Marysville, May 2. Modelplane meet sponsored by Exchange Club. L. C. Armstrong, 229 "B" St., Yuba City.

CALIF.—Santa Inez, May 9. Santa Barbara Modelers air-model Omnimeet. S. D. Hill, 1020 State St., Santa Barbara.

NEW YORK—Brooklyn, May 15. Model Flying Fair sponsored by N. Y. Mirror at Floyd Bennett Field. Ted Clodius, N. Y. Mirror, 235 E. 45th St., NYC.

NATION-WIDE. May 15. 5th Annual Armed Forces Day. Open House at air bases, military establishments and armories. For location of nearest display check your nearest military representative or Coordinator, Armed Forces Day, Office of Public Information, Department of Defense, Room 2E-780, Pentagon, Washington 25, D. C.

ILL.—Chicago, May 16. Midwest Miniature Race Car Society meet. Carl Noward, 1384 Berdan Ave., Toledo, Ohio.

WISC.—Milwaukee, May 16. Flying Electrons R/C modelplane meet. Victor Weisebrodt, 2100 E. Webster Pl.

CONN.—Hartford, May 16. Modelplane team race sponsored by Greater Hartford Model Airplane Club. Richard Matava, 358 Prospect Ave.

CONN.—Hartford, May 23. Greater Hartford MAC air-model team race. Richard Matava, 358 Prospect Ave.

PENNA.—Easton, May 23. Model Airplane Doctors' air-model meet. Russ Sottosanti, 1113 Keane St. Easton 20394.

CALIF.—Los Angeles, May 29-30. Modelplane State Championships sponsored by Calif. State Exchange Clubs. R. E. Gass, 2864 Rutgers Ave., Long Beach 15.

CALIF.—Santa Ana, May 29-30. State air-model championships sponsored by Exchange Clubs. J. R. Donahue, Jr., 449 W. Manchester Ave., Inglewood.

OKLA.—Tulsa, May 30. Glue Dobbers air-model record trials. W. H. Kehr, 4940 N. Johnstown.

IND.—New Castle, May 30. Midwest Miniature Race Car Society meet. Carl Noward, 1384 Berdan Ave., Toledo, Ohio.

NEBR.—Scottsbluff, May 30-31. Peanut Pilots air-model meet. C. H. Adkins, 2418 Ave. "E".

ILL.—Chicago, July 27.—Aug. 1. National Championship Model Airplane Meet. A.M.A., 1025 Conn. Ave., N.W., Washington 6, D.C.

CALIF.—Elsinore, July 27-Aug. 5. National Soaring Contest. Includes modelplane events. L. M. Licher, 767 Haverford Ave., Pacific Palisades.

IND.—Anderson, Aug. National miniature race car championships. Carl Noward, 1384 Berdan Ave., Toledo, Ohio.

HOLLAND Wasp ACCESSORIES
AT YOUR DEALER

Class A & B

Class ½A

Adapter plates available to fit most popular makes of engines.

It's for you! A 3 for 1 bargain unit! Micro tank, timer and engine mount at the cost of most tanks only. Start and adjust engine with full tank—release valve lock and engine runs out only predetermined amount of fuel in timing cell.
For .049 and similar engines, **$1.50**
For .19 to .33 engines.... **$1.75**

Clip seconds off your starting time with HOLLAND Instant-Action GLOW PLUG CLIP. One hand does the trick when you use the Holland Glow Plug Clip. Clip it on—snap it off—you're on the air!.. **15¢**

NEW! HOLLAND HANDY WRENCH
Two-ended wrench for loosening or tightening glow plugs and removing cylinders—without damage. Accurately engineered to fit most engines. Keep one handy in your tool box!... **25¢**

HOLLAND ENGINEERING CO., El Monte, Calif.

WESTERN CANADIAN HOBBY DEALERS

FOR FASTER SERVICE AND LOWER SHIPPING COSTS
TRY
WESCAN
Wholesale Hobby Suppliers
WRITE FOR OUR NEW 50 PAGE CATALOG
P.O. BOX 4272 Edmonton, Alberta, Canada

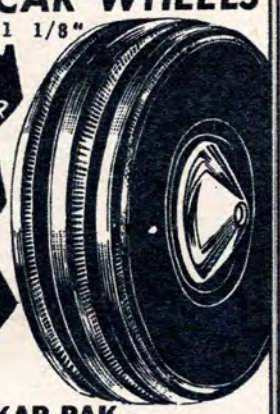
NEW! JOY thunderbug
½A STUNT SENSATION

Here's the ½A SIMPLIKIT you've been waiting for! This easily-built all balsa stunt model has phenomenal performance! You'll have to fly it to believe it! End plates improve wing efficiency and line stability and give the THUNDERBUG that "jet fighter" look. All parts precision cut of Grade "A" balsa. Use any ½A engine.

Span . . . . . 18" Length . . . . . 15"
$1.50 AT YOUR DEALER
JOY PRODUCTS COMPANY INC. MENOMINEE MICHIGAN

KAP-PAK

RACE CAR WHEELS
1 1/8"



3 THREAD SOLID RUBBER
STURDY HUBS
30¢ PER PAIR

"Ask for KAP-PAK for a modeling success"
AT ALL HOBBY-CRAFT STORES

KAP-PAK Products.
156 WEST WALTON PLACE
CHICAGO 10, ILLINOIS
FOR THE BEST IN MODEL ACCESSORIES

Build Pre-Fab SCALE TANKS
Designed From Information and Photos Supplied by U. S. Army Ordnance

USA PATTEN '48 11½" Long

11½" Long USA Gen. SHERMAN

$2.95 EACH PLUS 25¢ POSTAGE

12" Long USA T41 'BULLDOG'

13" Long USA Gen. PATTON

12" Long German 'Tiger'

14½" Long Russian 'STALIN'

WITH ROTATING 'ACTION' GUN TURRET

A complete line of Korean and World War II battle tanks by MERCO. Simple construction from full-size plans. Build authentic models for your den or library. SCALE: 1 inch equals 2¼ feet.

FEATURES: DIE-CUT BALSA PARTS • LIGHTS ROTATING TURRET • METAL AIR VENTS AND GRAB IRONS • PLASTIC PARTS • DECALS • FORMED BOGIE WHEELS • SHOVEL AND PICK AXE CONTOUR SHAPED BALSA • FULL-SIZE PLANS

AT ALL DEALERS—If Out of Stock Order Direct

• MERCURY MODEL •
920-A5 UTICA AVENUE • BROOKLYN 3, N. Y.

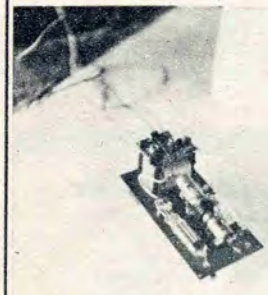
Look For This Label For The Tops In Radio Control

ESSCO-R/C PRODUCT
From
Electronic Specialty Supply Co.
58 WALKER STREET
NEW YORK 13, N. Y.

It is your guarantee of quality—service—satisfaction at the best prices on all R/C materials

Good flying weather is here
Safe—reliable—long range is possible when you install Essco's new complete receivers

THE ESSCO-TROL RCVR, a complete new 2 tube economical set, that is certain to give reliable long range operation (our original basic circuit design dates back to 1931). Above deck component and tube assembly allows for popular bulkhead or plugin mounting. Size 1¾ x 3½, wt.—3½ oz. Complete receiver with tubes and sensitive hardy relay. At a low, low price $15.95
We repeat, this is a completed receiver, ready for installation, at a kit price..... 15.95
A PARTS KIT for those that insist on building their own..... 16.95



SPECIFICATIONS

INPUT TUBE, RK-61—Hard tube, 2nd stage, **ESSCO MPC-1.** Total filament drain (2 tubes) 85 ma. Input tube idles at .5 ma. drops to .1 ma. on signal. 2nd stage current rise from 0 to 2.2 ma. (using 45 volt B battery) allows non-critical relay setting. These operation settings allow long tube and battery life (2nd stage has min. life of 1,000 hours).

THE BEST MULTITUBE RECEIVER BUY TODAY

WHY IS EVERYONE BUILDING THE MINI-MAC RECEIVER WITH THE ESSCO PARTS PACKAGE?

Because it is the most complete parts kit available, comes complete with drilled base board, tube, wound coils, fil. switch, plugs for cable and metering, 25K pot., etc. Nothing is left out. Bargain priced at..... $ 6.95
With special ED relay..... 11.95
Instructions supplied to use the ESSCO MPC-1 tube that gives far better operation than the CK-526. The use of the MPC-1 tube allows you to use your favorite relay. Specify tube desired when ordering.

THE ESSCO-MITEY-MINI-MAC RECEIVER

ESSCO'S improved version of the M/M supplied as a completed unit. A little larger size 1¾ x 2¼, wt. only 2½ oz. Has a more hardy (and always available) relay. Uses the ESSCO MPC-1 tube. Idles at 2.2 ma., signal drop off .3 ma. Economical 40 ma. fil. For long B battery life we recommend carrier on operation of transmitter. Receiver idling current will then be .3 to .4 ma. Off position of keying switch will then cause plate current rise to 2.2 ma. This results in reliable relay action.
THE R/C INDUSTRY'S BEST RECEIVER BUY —COMPLETE ESSCO M-M-M RECEIVER.....$13.95

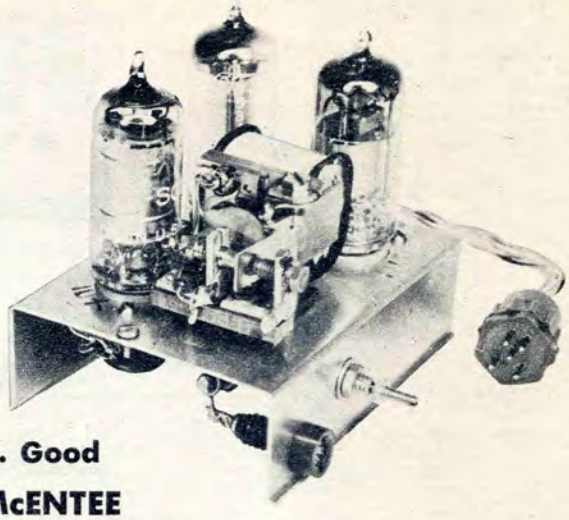
THE NEW ESSCO RCX JR. TRANSMITTER KIT. A new compact HIPOWER 4 watt transmitter. RF subassembly consists of drilled base and assembled components. Requires half hour to wire up and test. Complete set of highest grade components, tube, Petersen Z9A crystal, 9½ ft. whip antenna w/mount, keying cable assembly. Complete assembly instructions. RF assembly can be used to rebuild your present low power transmitter such as Aerotrol and others.
THE BIGGEST BARGAIN IN R/C today SPECIAL.....$12.45

Check our previous ads for additional listings. Write for free 1954 catalog and get on list for our new monthly mailing "THE ESSCO BULLETIN." Money back guarantee on all items.
TERMS: Prepaid orders under ½ lb. postage paid by us. All orders carry our free insurance policy. Free bonus on all oders. Complete stocks carried at both branches. Order from nearest to save time and transportation costs.

SERVING THE WEST
ESSCO-WEST COAST
670 Bell Street, Pala Alto, California
Note to Calif. residents:
Please include 3% sales tax.

SERVING THE ENTIRE R/C FIELD
ESSCO-NEW YORK ELECTRONIC SPECIALTY SUPPLY CO.
58 Walker Street, New York City 13, New York

Non-Selective Audio Tone 3-Tube 27 mc. R/C Receiver



Designed by Dr. W. A. Good

Described by H. G. McENTEE

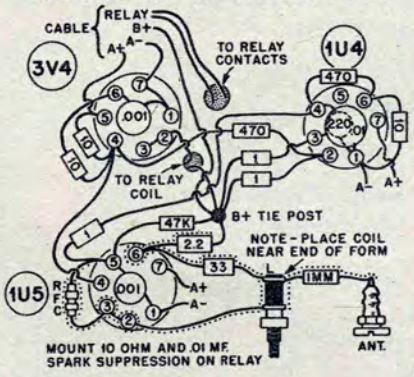
■ This set differs from those so widely in use today in that it will not respond to a plain RF carrier—the signal must be modulated at an audio frequency. Thus the receiver is not so apt to pick up the wrong transmitter, quite an advantage considering how crowded the 27¼ mc. spot is today. While a wide range of audio tones will work the set, it does work best at the frequency to which the transmitter to be described next month is set. Normally, the RF signal is left on at all times, and the modulation is keyed to give the control pulses.

Receiver idles at about 3 ma., and this current may be seen to increase slightly when the R.F. signal is turned on; when the A.F. signal is received, the plate current of the third tube drops to zero. This wide range of current change allows very positive relay action. It is normally not necessary to suspend the receiver by rubber bands—mounting on sponge rubber is usually quite satisfactory.

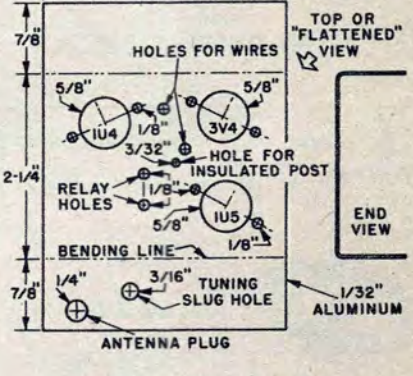
A.F. tone operation has another advantage, in that control is possible over great distances with very low power; it is unnecessary to go anywhere near the maximum 5 W. input F.C.C. allows.

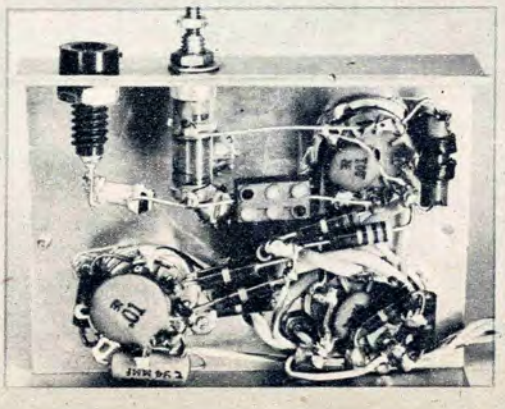
While no great pains were taken to produce the smallest possible receiver, it has been made as compact as practical, while still employing the low cost and widely available miniature 7-pin tubes. This receiver has only one control—that for tuning. It requires no sensitivity adjustment and is much more tolerant of wide changes in battery voltages and antenna loading than such receivers as the single gas and hard tube types. Thus, although this one will take more power from both A and B batteries, it can be considered much more trouble-free and less fussy than the single tubers.

BOTTOM VIEW OF RECEIVER WIRING AND PARTS LAYOUT.

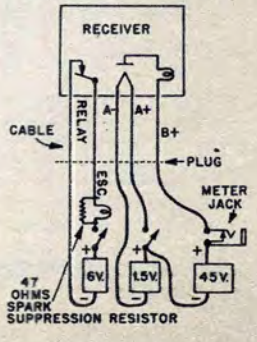


"WAG" RECEIVER CHASSIS





"WAG" WIRING FOR RECEIVER AND BATTERIES



THE ~~"LIVE WIRE"~~ "Cruiser"

NEW!

A fine new 100% Radio Controlled model, very realistic in appearance, exceptional in performance, high in quality. *THE MODEL WHICH WILL SET THE PACE!*

The "Cruiser" has been developed to give you "big plane" looks and appearance, combined with the fine flying qualities of our Live Wire design. In the "Cruiser" you have the ultimate in R/C design, construction and utility giving a semi-scale model capable of contest performance under any conditions. The "Cruiser's" performance is exceptional with the simplest single channel radio, yet it accommodates the fabulous multi-channel systems with ease giving even finer performance with the additional controls!

SPECIFICATIONS:

Wing Span: 65½"
Wing Area: 775 sq. inches
Wing loading: Min. 13 oz./sq. ft.; Max. 20 oz./ sq. ft.
Weight ready for flight: 4 to 6 lbs.
Bare model weight: 3 lbs.
Power: .19 to .23 engines
2 or 3 wheel landing gear as desired

Kit Contents:

★ Full size working drawings
★ Complete instructions including radio installation
★ All necessary hardware
★ Dural gear
★ R/C Bellcrank and horn
★ Grade A/1 materials
★ Precision finished parts
★ Decals

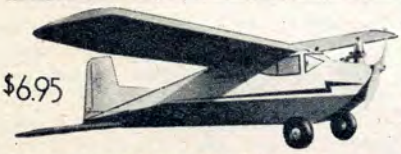
Complete Kit $14.95

Exclusive Feature

New, More Compact R/C Unit

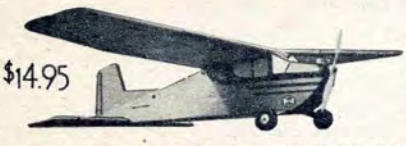
★ Remove entire R/C gear in less than one minute!
★ Allows easy bench checks and repairs on actual equipment.
★ Removable unit can be switched between several models!
★ Changes can be easily made.
★ Approved by all leading radio manufacturers!

SIMPLER
More Compact—More Rugged



$6.95

THE "TRAINER" .08-.15 ENG.
THE WORLD'S MOST POPULAR R/C MODEL!



$14.95

THE "SENIOR" .19-.23 ENG. CUSTOM BUILT

"LIVE WIRE"

The name that signifies the PROVEN BEST for all R/C flying.

Only with Live Wire Models do you get all these superior design features!

PENETRATION . . .
The force arrangement is such that it provides exceptional wind penetration without excessive power. Climb is controlled under all flight conditions and speeds.

STABILITY . . .
All design factors are aimed to provide exceptional stability and immediate recovery from abnormal positions without sacrificing maneuverability.

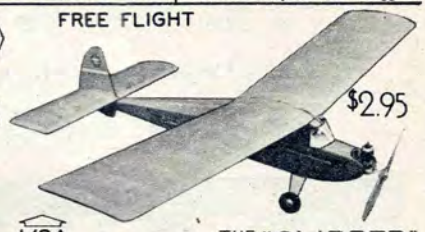
POSITIVE CONTROL . . .
The Live Wire is instantaneously maneuverable and responds to any rudder action whether in the glide or under power assuring fine precision flight.

REMOVABLE R/C UNIT . . .
All the radio gear is installed in a removable unit making things easy to get at. This results in more and better flying with less work.

SIMPLIFIED STRUCTURE . . .
The extensive use of prefabricated sheet balsa makes for a simple to assemble model with extreme strength which gives many trouble free flights.

A/1 MATERIALS . . .
Live Wire kits are complete kits for building the model. All materials are unconditionally guaranteed to be the finest, instructions cover building, radio installation and flying, plans are complete and full size.

FREE FLIGHT



$2.95

1/2A

THE "CLIPPER"

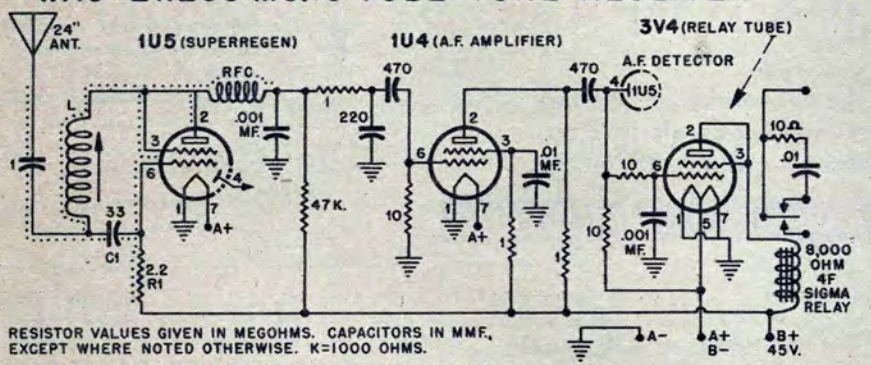
$3.95

THE "KITTEN" R/C

PRODUCT OF **THE DEBOLT MODEL ENGNR CO.** WILLIAMSVILLE, N. Y.

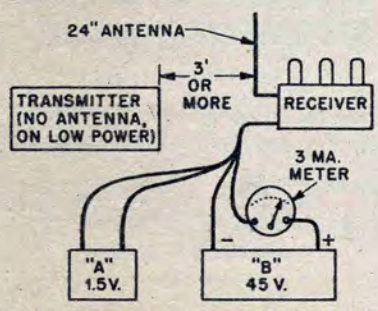
Dr. Good's comments and full-size chassis drawings are included in Group Plan # 554A (35c) from Hobby Helpers, 770 Hunts Pt. Ave., New York 59, N.Y.

"WAG" 27.255 MC. 3 TUBE TONE RECEIVER



RESISTOR VALUES GIVEN IN MEGOHMS. CAPACITORS IN MMF., EXCEPT WHERE NOTED OTHERWISE. K=1000 OHMS.

L-36 TURNS OF NO. 32 ENAMEL WIRE CLOSE WOUND ON 1/4" DIA. FORM – CTC TYPE LSM WITH RED DOT IRON SLUG. WIND COIL CLOSE TO OPEN END OF FORM.



TRANSMITTER AND RECEIVER SET-UP FOR METER TEST

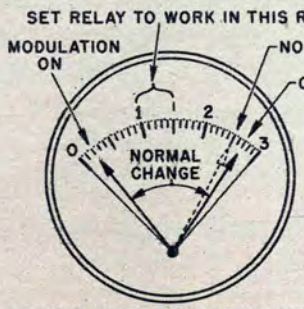


FIG.1

RECEIVER METER OPERATION WITH A 3 MA. METER IN THE B+ LEAD AND WITH THE TRANSMITTER SIGNAL AS INDICATED.

TRANSITROL
CAPITOL CITY CRAFTS & HOBBIES
DES MOINES IOWA
RADIO CONTROL UNIT

RC PARTS & ACCESSORIES

3" AIR WHEELS (ENGLISH)	$ 3.95
4" AIR WHEELS (ENGLISH)	4.95
2½" Air Wheels (Austin)	1.50
DMECO ANTI STALL TANK	1.25
Berkeley Escapement	3.95
Citizenship Escapement	5.95
Bonner Escapement SN	6.95
Bonner Compound Escapement	14.95
Bonner Motor Control Less Escape	2.95
Battery Boxes (Plastic)	
4 pen cells individual wire	.85
4 pen cells wired 3v	.75
45v Hearing Aid Batt Boxes (Metal)	.50
XFG-1 Tubes	3.25
Mini-Mac Kit with relay	11.95
Mini-Mac Kit less relay	5.95
E.D. 3 REED UNIT HI OR LO	18.95
E.D. CLOCKWORK ESCAPEMENT	12.50
Amco .21 Diesel Engine (English)	21.95
E.D. .15 Diesel Engine	16.95
Mills .08 Diesel Engine	13.95
Albon Javelin Diesel Engine	11.95
Berkeley Super Aerotrol Complete	45.00
TWO SPEED CARB INSTALLED ON YOUR ENGINE RETURNED SAME DAY	4.95

Capitol City Crafts & Hobbies
P. O. Box 901 3015 Ingersoll
Des Moines, Iowa

INTRODUCING THE New F-B

BASIC TRAINER

It's Neat!

THE BASIC TRAINER has aluminum landing gear, complete hardware (pre-fab—only 7 parts to bolt and glue together), ready to fly in an hour; for engines .14 thru .35. Class A-B & C. Sells for....$2.95

By mail add 25c

F-B Planes give the beginner or experienced model builder a chance to get real enjoyment out of the most exciting modern pastime.

2 NEW F-B CAR KITS

☆ CHEVROLET CORVETTE

☆ JEEP STATION WAGON

Fully detailed plans show step by step construction. Pre-fab, balsa, metal hub caps, full decorative decals, plastic steering wheels and windshields, rubber-tired wheels. Per kit, $1

F-B MODEL AIRCRAFT — 3240 LARIMER — DENVER 5, COLO.

Ideal MODELS

"Sea Weed" SAIL BOAT

IT'S NEW!

Easy to Assemble Gleaming 18" Hull Prefabricated parts. Will outsail anything in it's class. Designed by Tex Foster (Model Yacht Authority) SEE THE ENTIRE LINE AT YOUR DEALER. Send 10¢ for CATALOG OF SHIP MODELS from 50¢ to $9.00

$3.95 BY MAIL $4.45

IDEAL MODELS
24-26 WEST 19th ST., NEW YORK 11, N. Y.

"LEAPIN' LENA"

The "New Look" in radio stunt

Span 56"
Area 540"
Power .15-.19

Price 7.95 p.p.

Two years' in development, this ship is a contest proven performer. Maneuverable, yet stable and rugged enough for the most inexperienced flier. Kit includes razor-sharp precut parts; full size, simple, detailed plans; top quality balsa; silkspan and all hardware.

MODEL TECH. SPECIALTIES
BOX 485 RIDGEFIELD, CONN.

Career in Radio

(*Continued from page* 54)

good policy to ground the antenna at all times when you are not using the set.

When you get up to about five or six dollars, you are in the single tube receiver class, but to this initial cost must be added another couple of dollars for batteries in case of a battery-powered set—and these wear out and will have to be replaced from time to time. While tube receivers are more costly, and do have continuing upkeep cost besides, they will give vastly better results than the crystal jobs.

With a single tube receiver, it is quite possible to pull in stations from all over the world (using short wave bands, of course). This is because the tube circuit is not only inherently more sensitive than the crystal, but through a trick called regeneration, the tube can be made to build up the incoming signal many times.

Some of the single tube receivers are made for use only on the broadcast band, but many of them can also be utilized on short wave bands, by the use of "plug-in" coils. These coils fit a socket in the receiver, and a set of five or six will enable you to cover the entire broadcast band, and a large segment of the short wave spectrum as well. A kit for such coverage will cost around $10, with tubes and coils, but less batteries.

We mention "tubes" just above, since

Flyin'.. or Fussin' ?

Moody Kits small tool sets are the handiest tools going to keep your planes going. Screw driver Kit shown (3" is actual size) holds five interchangeable blades, sizes .40", .55", .70", .80", .100". Write for folder that completely describes other Moody Kit tools. Buy 'em at your favorite hobby or hardware store or $1.75 postpaid from:

Moody MACHINE PRODUCTS CO. INC.
36 Dudley Street, Providence 5, R. I.

SIG BALSA WOOD

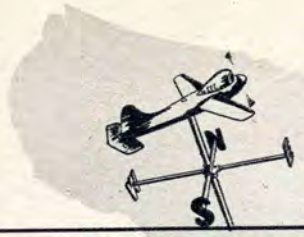
GRADE AAA—PRECISION CUT
CAREFULLY GRADED
PROCESSED SPECIFICALLY FOR MODEL AIRCRAFT BUILDERS

Over 300 stock sizes

Write for FREE SAMPLE and price list of wood and model supplies

DEALERS: WRITE FOR DISCOUNTS

SIG MANUFACTURING CO.
MONTEZUMA, IOWA



Hobby Shop Directory

Model Builders! Here's a listing of the nation's leading hobby shops. You'll want to file it away—and when you're in the neighborhood, drop in and browse around. They're expecting you.

CALIFORNIA—LOS ANGELES
Nationally advertised model planes, boats, trains, kits and supplies
Weekdays and Mon.-Wed.-Fri. Eves.
PICO MODEL CO.
2540 W. Pico Blvd. DUnkirk 7-5894

CANADA—ONTARIO—HAMILTON
Complete model supplies
Boat Kits Plane Kits
Motors
Prompt mail order service
Catalogue on request
GORDINEER'S
STANDARD CYCLE SERVICE
230 Locke St. S. Ph. 2-7367

INDIANA—INDIANAPOLIS (19)
Model Planes, Trains, Race Cars, Motors and Motor Parts.
Boat & Ship Models, Balsa Wood.
10:30 to 7 P.M. Daily
BOB STEELE HOBBY CENTER
1008 No. Emerson Ave. Irvington 1617

KENTUCKY—LOUISVILLE
Model Airplanes—Motors—Race Cars & Supplies. Complete Parts Service.
Repair shop with South Bend Lathe.
FISCHER'S HOBBY SERVICE
618 S. Fourth Clay 3213

MASSACHUSETTS—CAMBRIDGE
Model planes, motors, railroads, ships and accessories.
9 to 6 daily and Thurs., Sat. evenings.
CROSBY'S HOBBY CENTRE
1704A Mass. Ave. KI 7-4389

NEW JERSEY—PARSIPPANY
The Town of All Hobbies—
30 mins. from N. Y.
Open 7 days—All day Sat., Sun.
Flying fields available
Buy'em—where you Fly'em.
RICH'S HOBBYTOWNE, INC.
Route 46 Boonton 8-2666

NEW YORK—BROOKLYN HEADQUARTERS!
Everything for model airplane builders.
Accessories our specialty.
Engines, parts and service.
Complete U-Reely Service.
Everything Advertised in Air Trails
HOBBIES For Young Men
PARK HOBBY CENTER
8120 Seventh Ave. Shore Rd. 5-2972

NEW YORK—BROOKLYN
Large Selection of Hobby Crafts
● Planes ● Trains ● Cars ● Ships
Boats ● Stamps ● Kamera &/or Films
Store hours 10 to 9 p.m. daily & Sat.
Aero Club meets Tues. 7 p.m. to 9 p.m.
HO Club meets 8 p.m. Wed.
BROOKLYN HOBBY DEN
6718 Ft. Hamilton Pkway SH-8-6533

NEW YORK—JAMAICA (3)
HOBBIES—THAT'S ALL!
HOURS: 10 a.m. to 8 p.m. daily
Mon. & Fri. 10 to 10 p.m.
Saturday 9 a.m. to 8 p.m.
JAMCO (Jamaica Co. Hobbies, Inc.)
179-29 Hillside Ave. JA 3-9140

NEW YORK—LEVITTOWN & HICKSVILLE
Model Airplanes, Radio Control, Boats, Trains, Art Supplies. Complete Stock.
For beginner and expert alike.
PAUL PLECAN'S HOBBY SHOP
West Village Green LE 3-7379

most of the kits in this price range have two tubes, the second tube being an audio amplifier, which makes louder any signal the set can pick up. Note that such an amplifier does not in general allow you to get any more stations, but makes those you can already tune in somewhat louder.

Any receiver of more than about two tubes requires too much battery power to make its use very practical (unless you are located in a remote area away from power lines), so the next step is to try a kit using a tube or two that will work right from alternating current (AC) power lines. A kit for a three tube BC band receiver costs around $12, and tubes for it will run another $2.50 or so.

There is some confusion about the number of tubes in these receivers. Some makers list them as having one tube plus rectifier (the latter usually being another tube, but not one that contributes to the actual sensitivity of the set, or the loudness of the signal). Others are sold simply as two-tube sets, so make sure which you are getting. Some of the sets use a selenium rectifier, which can't possibly be counted as one of the tubes; if such a set is called a two tuber, therefore, you can be sure that it has an audio amplifier, and will produce good loud signals. There is another angle here, too; some of these sets use a double section tube, which is actually two individual tubes in one "bottle" (or "can"). The results will usually be just as good as though two individual tubes were used, and there is quite a saving in space and cost.

Model-Hobby World

(*Continued from page* 81)

they have been able to find out that they can do is M-O-N-E-Y. Since the S.A.A. itself doesn't have too much in the way of funds, this would be impossible without outside sponsorship. As far as organization is concerned they do have more than adequate personnel available to run such contests, and guys with the know-how. The interest in gliders is certainly here, knowledge too; perhaps we would be wise to see what the S.A.A. can do. One suggestion Lloyd makes is to contact various aviation concerns over the country and possibly get one from each section to sponsor the winner in their district. Certainly Lockheed's backing of Perryman should not go unnoticed. More power to the S.A.A., we say. They have shown the interest, we should help them.

FLY JETS!
You can learn as an Air Force Aviation Cadet. You'll graduate with an officer's commission, earn over $5,000 a year and have a big future in jet aviation. See your Air Force Recruiter now.

This control line endurance keeps popping up, so we will list the rules the WAM flies under so that if anyone is interested he can try to top the 3½ hours of flying by Bernice Jaynes and Lt. Dick Moorhead. They are as follows:

1. Any make of plane and any make and size of engine may be used.

2. *Refueling* in flight shall *not be permitted.*

3. The word pilot shall be the term used for the contestant flying the model-plane.

4. For individual record performance the plane must be taken off, the flight controlled in its entirety, and the plane landed by one pilot only.

5. For club performance more than one pilot may be used to control the plane in flight.

6. The control lines shall not be attached to a pylon or any other mechanical device for aid in controlling the flight other than the control handle held by or affixed to the pilot.

7. Any plane that exceeds five pounds in weight shall be flown with lines not less than .020 inch diameter.

8. Length of control lines shall be not less than 25 feet or more than 70 feet long.

9. Time shall start the instant the plane becomes airborne and shall end the moment the plane again touches the ground.

10. Officials shall be a lap counter and a timer. The following data must be recorded: (a) Total time (b) total laps (c) make, model and displacement of motor used (d) volume of fuel tank (e) combined weight of plane and fuel (f) length and diameter of lines used (g) type of fuel used. *—Dick Everett*

Southern Scene. The Montgomery, Ala., "Rebelaires," never want for something new. We hear that Jack McCann and his associates are planning to hold a non-refueling endurance U-control event. For a fuel tank in Jack's ship he plans to use a gallon can! It will be in the same big ship that recently lifted more than 11 pounds! It is an original tricycle landing gear with nine-foot wingspan; has a shock-absorbing gear and is powered by a Fox .35. Some of us have estimated that this ship will fly about 3½ hours on the gallon of fuel. What's your guess? My guess is that Jack should be using a "relief" pilot! Would like to hear from any other modelers who have staged such an event, and know what the results were.

—R. H. Elliott, Box 5078, Atlanta 2, Ga.

another FIRST from pactra
Aero Gloss

FIRST HOT FUEL PROOF DOPE in SPRAY CANS!

Fellows—when you want that championship finish on your model plane—SPRAY IT ON! Full 12 ounces $1.95. Ask your dealer...

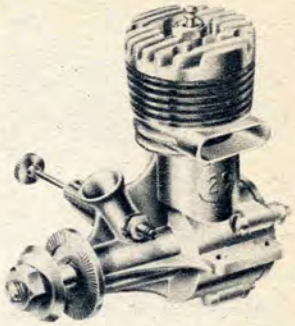
Re-usable Trigger Valve 19¢

FIRST in *Sales*, FIRST in *Quality*, FIRST in *Performance!*

Aero Gloss—A TRUE AIRPLANE DOPE! Adds strength to your plane. REALLY HOT FUEL PROOF! No more time-wasting extra coats. BINDS TO SURFACE! Won't crack or peel. QUICK PATCHING! Saves time and model planes. SMOOTH HIGH GLOSS! For high-speed no-resistance air flow!

pactra Chemical Company
1213 N. Highland Ave.
Los Angeles 38, Calif.

Veco's Class B 1954 Model Engine Is Powerful Performer



■ Henry Engineering Co., Burbank, Calif., is back in the model engine field in a big way with its redesigned "29" and "31" glow plug powerplants.

Veco engines were available in late 1950; material shortages caused by the Korean war made it impossible to continue their production. Good engines then, they are even better today.

Originally the manufacturers, in their effort to produce a well-fitted, long-lasting engine, didn't consider the often slipshod break-in procedure carried out by some modelers. They ran a heat test, checking the expansion of piston and cylinder, from room temperature to 425 deg. This quickly told them the story. The outside diameter of the piston expanded .0015 inches whereas the I. D. of the cylinder expanded .0012.

The former design consisted of a cast mehanite piston with a cylinder machined out of steel with the fins an integral part. The new design consists of a mehanite piston, a steel cylinder sleeve or liner and a die-cast aluminum fin section. With this combination, tests proved that clearance is identically the same at room temperature as it is at 425 deg. F. These new parts are all interchangeable with the old engine.

To guarantee full control over the engines, Henry Engineering Co. has equipped its own shop to produce them and hired Mel Anderson to supervise.

The main crankshaft bearing is now steel. It had been bronze. Wristpin pads formerly aluminum are now brass.

The hardened and ground steel crankshaft is heavily counterbalanced for smooth running. Rotary valve area is not as large as some competitive 29's but

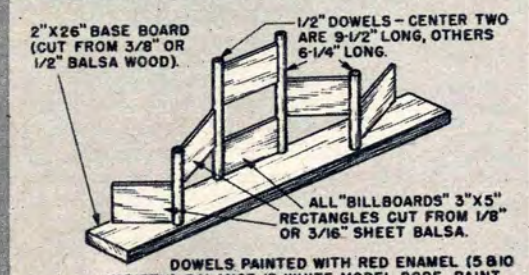
FRONT VIEW, FULL SIZE; OTHERS, HALF

PAY-OFF PROJECTS

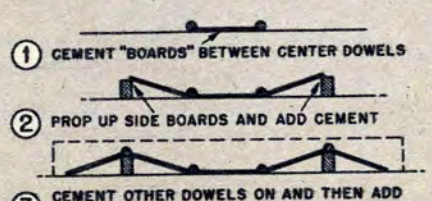
Making Money With Hobbies

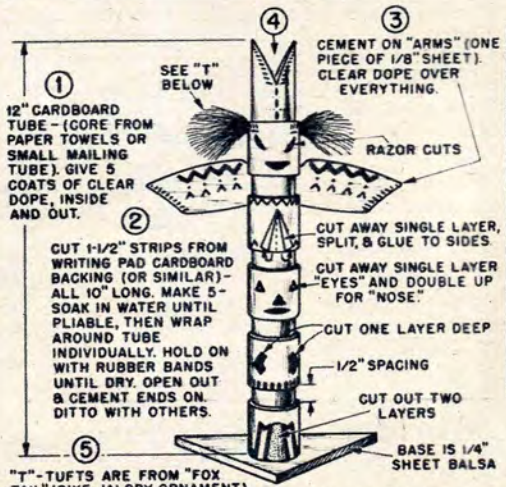
CASH FOR YOUR IDEAS

We'll pay $25 for each original "making Money with Hobbies" used here. Send only photos of completed item, rough sketches, description—we do rest.


2"X26" BASE BOARD (CUT FROM 3/8" OR 1/2" BALSA WOOD).
1/2" DOWELS – CENTER TWO ARE 9-1/2" LONG, OTHERS 6-1/4" LONG.
ALL "BILLBOARDS" 3"X5" RECTANGLES CUT FROM 1/8" OR 3/16" SHEET BALSA.

DOWELS PAINTED WITH RED ENAMEL (5 & 10 VARIETY). BALANCE IS WHITE MODEL DOPE. PAINT WHITE AREAS FIRST. DOPE CAN BE USED THROUGHOUT (IT IS FASTER DRYING), BUT ENAMEL PRODUCES A BETTER FINISH.


1 CEMENT "BOARDS" BETWEEN CENTER DOWELS
2 PROP UP SIDE BOARDS AND ADD CEMENT
3 CEMENT OTHER DOWELS ON AND THEN ADD TIP BOARDS. ADD BASE BOARD (SEE DOTTED LINES FOR POSITION).


4
3
CEMENT ON "ARMS" (ONE PIECE OF 1/8" SHEET). CLEAR DOPE OVER EVERYTHING.
SEE "T" BELOW
1
12" CARDBOARD TUBE – (CORE FROM PAPER TOWELS OR SMALL MAILING TUBE). GIVE 5 COATS OF CLEAR DOPE, INSIDE AND OUT.
RAZOR CUTS
2
CUT 1-1/2" STRIPS FROM WRITING PAD CARDBOARD BACKING (OR SIMILAR) – ALL 10" LONG. MAKE 5 – SOAK IN WATER UNTIL PLIABLE, THEN WRAP AROUND TUBE INDIVIDUALLY. HOLD ON WITH RUBBER BANDS UNTIL DRY. OPEN OUT & CEMENT ENDS ON. DITTO WITH OTHERS.
CUT AWAY SINGLE LAYER, SPLIT, & GLUE TO SIDES.
CUT AWAY SINGLE LAYER "EYES" AND DOUBLE UP FOR "NOSE."
CUT ONE LAYER DEEP
1/2" SPACING
CUT OUT TWO LAYERS
5
BASE IS 1/4" SHEET BALSA
"T"-TUFTS ARE FROM "FOX TAIL" (BIKE JALOPY ORNAMENT). CUT 1/8"X3/8" SWATCH (SKIN AREA), TRIM EXCESS HAIRS AND CEMENT IN POSITION. DOPE ENTIRE POLE MAIN COLOR (3 OR 4 COATS). USING SCRAP WIRE "BRANDING IRON" (END BENT INTO A "V"), APPLY COLORED TRIM. BOTTLE CAP SERVES AS "PALLETE."

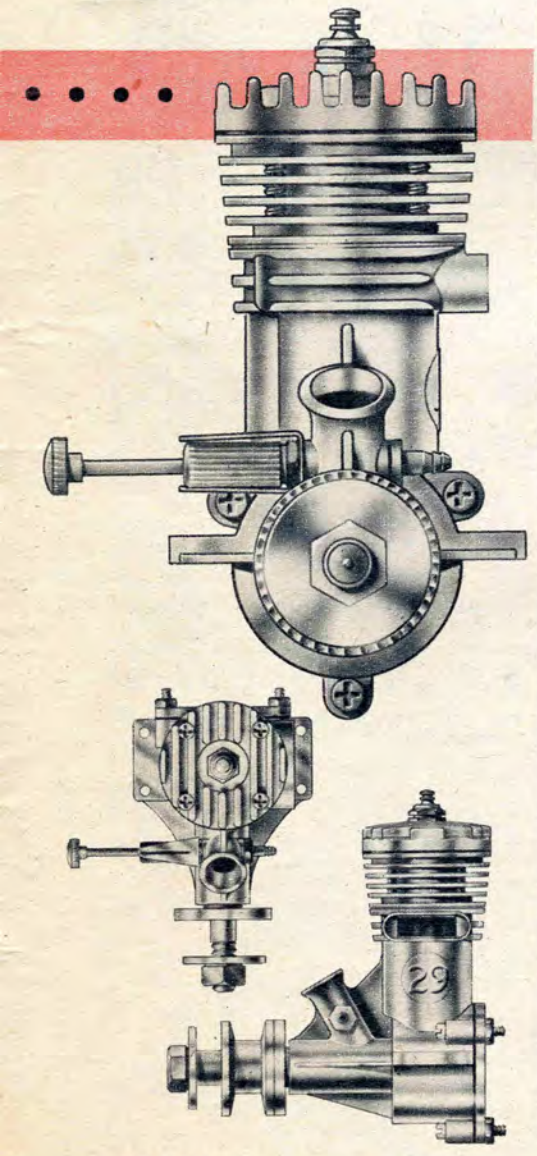
Don't be selfish with your shop! Share your building abilities with the youngsters. Send in your "Payoff-Projects."

this feature coupled with the rather small I. D. of the intake tube results in good fuel economy, an excellent point to remember when choosing an engine for team racing. Con rod is forged aluminum with an oil hole at crankpin end.

Wristpin is steel. Piston is cast mehanite with the lower portion relieved from a point midway at the wristpin hole to approximately 1/16" from the bottom, to reduce friction to a minimum. The cast aluminum back plate is held in place with Phillips machine screws.

As optional equipment Veco has a propeller extension, an aluminum turning, available for an extra 75¢. (It is shown on the side view of the engine here.) The high-compression ratio definitely calls for the use of a large husky propeller during the break-in period.

After one half hour running time, the test engine ran steadily and showed no signs of overheating. The propeller furnished with the engine is considered by the Henry test staff to be the best size and pitch for all-around use. Since we did not receive a propeller with the test engine we chose the same propeller that was used in testing the original design. Rpm's of this new model were higher. With a Veco 10/6, 10,700 was recorded. Revs increased to 12,200 with a 9/6 prop; a 500 and 400 rpm increase over the previous model.



New Lil' Rocket
HALF-A CONTROL LINE MODEL
AN AIRPLANE ANYBODY CAN FLY

Rugged Plasticized Balsa Wing
Gleaming Plastic Fuselage.
BUILT IN AUTOMATIC PILOT MAKES IT EASY TO FLY Try It... You Can Fly It
Pops Out Of The Box Ready To Fly
7.95
Complete With Engine, Control Stick and Line

LIL' ROCKET Kit, K. D., Less Engine, But Complete With Control Stick and Control Line, Only $1.95

NEW PLASTIC BODY GLIDERS

AEROMIC STREAK
High Performance Glider

29¢
Color Trimmed Balsa Wing

GLIDEO PLANE
Control Line Glider

Complete With Control Stick and Control Line
50¢

VICTOR STANZEL & CO.
SCHULENBURG TEXAS

"... a Sensational Performer!"

Philmore
"SPACE PATROL" CRYSTAL RADIO KIT

Anyone can assemble it — no soldering needed — and it brings in stations loud and clear! Precision-wound coil, factory tested crystal, metal strip connectors, step-by-step instructions. It's an outstanding favorite! Only $2.95

—also—
"Little Wonder" and "Supertone" Crystal Radio Complete Outfits, "Selective" Germanium Diode Radio Kit. 2-Tube, 3-Tube AC-DC Radio Kits for Broadcast and Shortwave.

See these swell kits and sets at your local dealer, or write for information to

Philmore MANUFACTURING COMPANY, INC.
"Pioneer Manufacturers of Electronic Kits Since 1921"
113 University Place, New York 3, N. Y.

SORRY but . . .

for Canadians only—who send 25¢ for our Mail Order HOBBY CATALOGUE we will give a FREE aeroplane kit worth at least 25¢. Supply, of course, limited. Write right now to:

THE HOBBY GUILD
20 ROCKCLIFFE BLVD.,
TORONTO, ONTARIO

• MAKE YOUR HANDS MORE CREATIVE WITH X-ACTO •

for any
MODEL AIRPLANE

flying or solid scale; glider, rubber, gas or jet; free flight, radio or control line.

THESE X-ACTO TOOLS

Files—$3.95 | "D" Drill Chuck Adapter—$1.25 | Screw Driver $1.50

Designed by model craftsmen and precision-made for fine work

WILL HELP YOU DO A BETTER JOB

and get more fun and satisfaction from your hobby.

NO. 86 HOBBY CHEST—$12.00
NO. 87 KNIFE & TOOL CHEST—$18.00

Send for 32 page booklet "Building Your First Flying Models"—25¢. Full size plans and instructions for 4 models plus articles and helpful hints.

dept. D5

x-acto®, Inc.
48-41 Van Dam Street
Long Island City 1, N. Y.

• MAKE YOUR HANDS MORE CREATIVE WITH X-ACTO •

The Last Word on HOBBIES

■ If we ever "close" another issue the way we did this one . . . ! The poor printer! Never have we been so late with our copy. First the big Model Industry Association trade show and convention took us to Chicago (and, brother, did we see a raft of fine, new hobby-model items that'll be appearing in the ad columns!). There, somehow, we got elected to the Board of Directors of the M.I.A. and consequently had to remain longer in the Windy City than anticipated. Then a third of the entire staff (that's two of six) took ill. But why tell you of our troubles? About the next issue, June, which goes on sale nationally around May 7. Here's some of the items we're promising ourselves that we just gotta get to you: a real zoftig space rocket that anybody can build and fly—even out of sight if you desire (power-plant remains behind); remarkable Catajet Racerdrome so you can race original design non-powered (that's what the man said, Sidney!) kit cars like Berkeley, Cavacraft, Ace or Monogram (to mention a few)—how? T-56 is the answer (again, the powerplant remains behind).

Best "Air Trails Model Annual" ever is this 1954 edition! 100 pages. Full of models, hints, building ideas. At your hobby shop, newsstand, or by mail for 50c in U.S. (Canada 60c, elsewhere $1.) Has aircraft mfrs'. addresses, club directory.

Also, for June: Don McGovern's fantastic 9-foot radio controlled land-sea monster planemodel; how to squeeze in model making at summer camp; and—*if* our schedule works out right—a brand-new type of "free flight" model which you can fly anywhere, anytime, without ever losing same!!!

Below—typical editor after missing his deadline. —*Al Lewis*

ENGINEERING DEGREE
27 MONTHS

Graduates in Demand

• Speed-up training in Engineering — Aeronautical, Chemical, Civil, Electrical, Mechanical and Radio (inc. TV and Electronics). B.S. degree in 27 months. Frequent trips to outstanding industrial plants. Modern lab facilities.

Earn part or all of your expenses in this large industrial center. Low tuition.

If you are called into service, while still a student, you will be prepared for a specialized military job, AND can return to school without losing credits. Approved for veterans. Enter June, September, December or March. Send for free catalog.

INDIANA TECHNICAL COLLEGE
354 E. Washington Blvd., Fort Wayne 2, Ind.

TROPHIES
Order NOW for your next meet!

Famous Russell Trophies, especially designed for model meets. The award worth winning and keeping!

RUSSELL BROTHERS
312 K.P. Bldg., Des Moines, Ia.

FREE! Catalog of model trophies, plaques, medals. 60-page all-sports catalog, 35c

MOTORS—FREE OF EXTRA COST

✓ Buy your new motor from us and get a new half-A motor worth $3.95 plus our surprise premium item free of extra cost with all orders totaling from $9.95 to $19.94.

✓ New motor worth $7.95 plus two of our surprise premiums included free of extra cost with all orders totaling from $19.95 to $29.94.

✓ New motor worth $11.95 plus three of our surprise premiums included free of extra cost with all orders totaling $29.95 to $39.94.

GLO MOTORS

Atwood Cadet 049	$3.95	K&B .19 or .23	13.95	Veco .29 or .31	14.95
Atwood .049 (U.C.)	4.50	K&B .29 or .32	15.95	Wasp .049 (U.C.)	5.70
Atwood .049 (F.F.)	4.75	McCoy .09	7.95	Wasp .049 (F.F.)	5.95
Atwood .051	5.50	McCoy .19	9.95	**DIESELS**	
Bluestreak .65	22.90	McCoy .19 R.H.	12.95	Dart .03	7.95
Cameron .09 M	9.95	McCoy .29 R.H.	16.95	E. D. .15 B.B.	15.95
Cameron .09M—2 SP	11.95	McCoy .60 R.H.	24.95	Javelin .09	7.95
Cameron .19 L	9.95	Ohlsson .19 or .23	11.95	McCoy .049	5.95
Cameron .19 R	9.95	Ohlsson .29 or .33	13.95	Mills .045	7.95
Cameron 19—2 SP	11.95	O.K. Cub .049S	4.95	O.K. Cub .075	7.50
Elf Twin .19S	21.50	O.K. Cub .074	5.95	**27.255 MCS. R/C**	
Elf Four .39S	45.50	O.K. Cub .099	6.95	Citizenship Transmitter	34.95
Fox .19	12.50	O.K. Cub .14	8.95	Citizenship Receiver	24.95
Fox .29 or .35	14.95	Orwick .29	17.95	Babcock Transmitter	39.95
K&B .02	5.50	Sky Fury .049	4.95	Babcock Receiver	29.95
K&B .035	3.95	Space Bug .049	6.95	Test Meter	19.95
K&B .049	6.75	Space Bug Jnr. .049	3.95	P.S.N. Escapement	5.95
K&B .09 or .15	10.95	Thermal Hopper .049	6.95		

Remember: The valuable extra premium is a surprise. So our offer is positively not available from any other advertiser. Send check or money order. No C.O.D.

ALL AMERICAN MODEL MOTOR EXCHANGE
DEPT. A, BOX 885 SANTA MONICA, CALIFORNIA

★ THUNDER BOLT ★
KING OF KITES

A man-sized kite for the older hobbyist. U-CONTROL-IT . . . perform stunts at will . . . loops . . . figure eights . . . spot landing . . . with perfect control.

• Ten Metal Fittings
• Large, light weight sticks

Choice of Covering:
VINYL Plastic..... $1.89
Extra Strong Paper..... $1.50
By Mail—Add 20c Postage

BIG 3½ FT. TALL

ROBEY SPECIALTIES
2836 Westbrook Ave. Indianapolis 21, Ind.

BE A FULL TIME CITIZEN
By serving as a *spare* time Army Reservist, you perform the duties of a *full* time citizen, protecting your family, your home, and your country. Join a local Army Reserve Unit today.

FLY ON WINDY DAYS
Fly with two to three times longer control lines.

INQUIRIES INVITED
$2.00 ppd.
EASY TO ATTACH REMOVABLE FOR SCALE MODELS.

DESLACKER
pat. pend.
Adjustable for ½A to class C, STUNT OR SPORT CONTROL LINE FLYING

Model Airframe Accessories
P. O. Box 596, Bellflower, California
(WRITE FOR FREE FOLDER)

Berkeley's NEW Controliners* FOR '54

- Deep Drawn Metal Cowl
- Complete Full Color Decal Insignia
- Complete Metal Hardware
- Formed Landing Gear
- Rubber Wheels
- Full Size Detailed Plans
- Completely Pre-Fabricated Wood Parts

$5.95

Bob Elliot's GRUMMAN "GUARDIAN"

Here is the latest design from the board of Bob Elliot, 1953 National Stunt Champ. A truly beautiful model, it is very close to actual scale, but can do the full stunt pattern with ease. When it comes to appearance, it will win top points for the exacting builder.

For .19 to .36 Engines **53" Wingspan**

This great new model makes an ideal Carrier event airplane, as it handles so easily! No trouble catching the arresting gear with this model.

SEMI-SCALE STUNT
For Stunt Events and Navy Carrier

Newest in Combat Stunt —

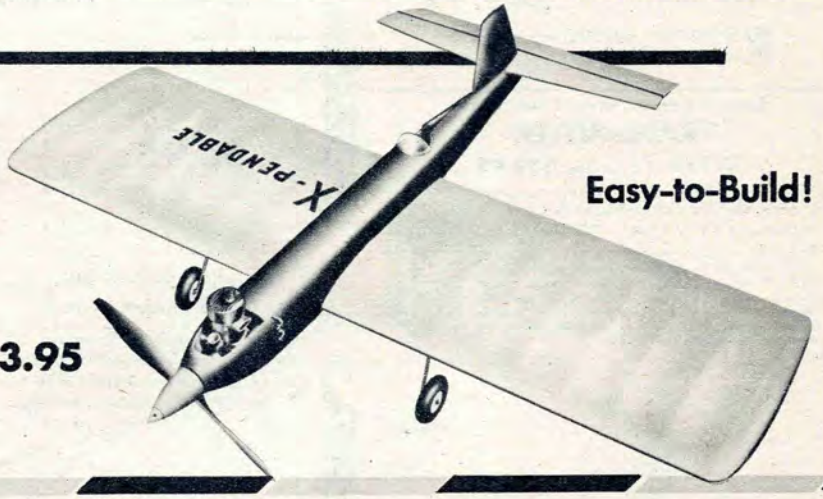
ZILCH "X-PENDABLE"

For .19 to .35 Engines — 38" Wingspan

The Controline Combat Ship that outperforms them all. Designed and tested with typical Saftig precision. You can build it in the same time it takes to build a profile job, but you will have a lighter, stronger, and faster model!

Kit includes all Pre-fabricated Wood Parts; Complete Controline Hardware; Metal Landing Gear; Rubber Wheels; and FULL SIZED PLANS, detailed as only Berkeley details them.

$3.95



Easy-to-Build!

Beech Aircraft's T-34A "MENTOR" Controliner*

For .14 to .29 Engines — 33" Wingspan 1" Scale

Beech Aircrafts T-34A Primary Trainer has been ordered into production for the USAF. Powered by a 225 hp. Continental, the two-place "Mentor" has a ceiling of 20,000 feet, speed of 180, and a range of 785 miles.

- Jim Walker "U-Control"
- Optional "Autotrol Rudder"
- ¼" Plywood Motor Mount
- Formed Tricycle Gear
- Authentic Full-Color Decals
- Rubber Wheels, Hardware
- Embossed Celluloid Canopy
- Carved Nose Cowl Blocks
- Elevator and Rudder Hinges
- Die-Cut Balsa and Plywood
- Full Size Detailed Plans
- Shaped, Notched Wing Edges

Proportions of the T-34A are perfect for Controline flying. Easily assembled by the "Step-Keel" method, the fuselage is balsa planked. The wing is reinforced to absorb landing impact. Jim Walker "U-Control" is used together with the optional "Autotrol" Rudder system. Decals are complete and include even the smallest details.

$4.95

---

buy BERKELEY at your local dealer!

If no local dealer is convenient, mail orders will be filled by Berkeley Model Supplies, Dept. AT., West Hempstead, N. Y. Please include 25¢ packing & postage.

Berkeley MEANS THE BEST RADIO CONTROL EQUIPMENT & MODEL KITS!

27 m.c. Crystal Control

"SUPER AEROTROL"

RADIO CONTROL

NO OPERATORS LICENSE REQUIRED!

"Super-Aerotrol" is the original 27.255 Citizens Band Radio Control. Since its introduction, it has outsold all other makes. We have tested many modifications of the original "Super-Aerotrol" but present "Super-Aerotrol" under equal conditions cannot be out-performed by any similar type equipment.

.14 to .23 Engines — 62" Wingspan

COMBINATION OFFER

DE-Super Aerotrol Combination Kit—#201-K

Combination Receiver-Transmitter Kit that sells for **$29.95**

Includes everything found in both DE-202K and DE-203K Kits. By buying them together it saves you **$3.95**

Dr. Walter Good's

"ROYAL RUDDERBUG" $6.95

A Proud Addition to Berkeley's Family of Fine Gas Models!

The entire model building world knows and respects Dr. Walt Good, many-time National R.C. Champion and re-knowned physicist. His new design is the best size for all-'round performance with single channel equipment.

The newest version of one of the most popular R.C. jobs ever designed. Simplified in construction, and improved in performance. A fine kit, produced to Berkeley's standards of completeness and engineering exactness.

READY-TO-OPERATE

SUPER AEROTROL

Including: **$49.95**

TRANSMITTER; ANTENNA; RECEIVER; ESCAPEMENT; & O-3 MILLIAMMETER.

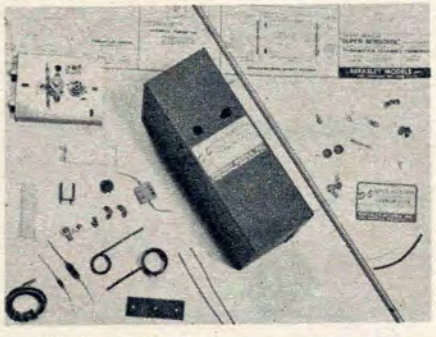
"Super Aerotrol" Crystal Controlled

TRANSMITTER

In Kit Form: less tube **$19.95**

- Portable — Self contained — No separate antenna — No external Batteries!
- Operates on 27.2 mc. • Weighs 3.5 lbs.

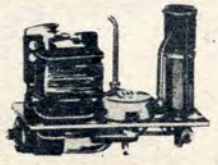
Kit includes all necessary parts (except tube and batteries): Precision Ground Crystal; Painted Metal Cabinet; Finished Sectional Antenna; stamped and formed chassis with all holes punched; all necessary components, resistors, condensers, coils and chokes; color coded wiring. Can be assembled in less than two hours. Complete building and operating instructions are included.



"Super Aerotrol"
Dust Core Tuned

RECEIVER

In Kit Form:
less tube **$13.95**



- NEW "locked-channel" dust-core tuning.
- Light in Weight, 2¾ oz. less batteries.
- Super-regenerator circuit, dependable.

Kit includes: Finished, tested sensitive relay; finished dust-core tuner; drilled bakelite base with condensors and eyelets attached; all electrical components, condensors, resistors, coils, chokes and potentiometer; all necessary contacts, and color-coded wiring. Can be assembled in less than two hours. Complete instructions are included.

$3.95

Variable Camber Wing for Radio Control Flying!

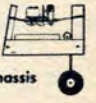
Slotted flaps may be depressed 10° for free-flight; depressed 25° for slow speed radio control flying; or raised 5° for high speed radio control flight.

Army Liaison YL-24

"HELIOPLANE"

For .049 to .14 Engines 38¾" Wingspan—1" Scale

$3.95



Radio Chassis

BOOTSTRAPS "A-RC"

For .09 to .14 Engines — 54" Wingspan
(Empty weight 21 oz. — Radio, Equip., 14 oz. max.)

Split rudder tab for separate trim adjustments. Clip-in prone engine mount, tri-cycle gear.

BRIGADIER "R. C.-38"

.035 to .099 Engines—38" Wingspan

This completely re-designed "½ A—A" Free-Flight may be flown as a Radio Control job, a PAA-Load model, or a free-flight Sport Flyer. **$1.95**

"SUPER BRIGADIER"

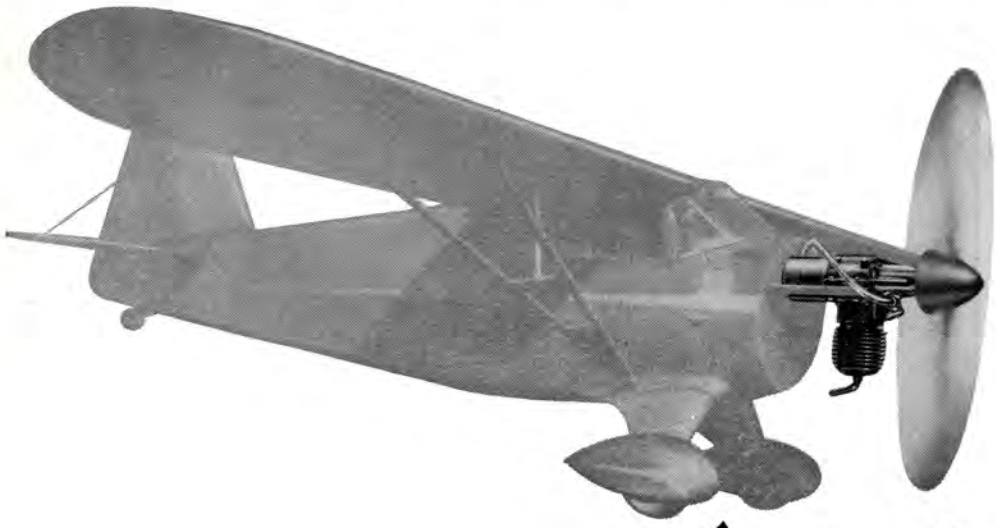
58" Wingspan—For .19 to .36 Engines

Especially designed by Henry Struck for Radio Control and PAA-Load flying. **$4.95**

buy **BERKELEY** at your local dealer!

If no local dealer is convenient, mail orders will be filled by Berkeley Model Supplies, Dept. AT., West Hempstead, N. Y. Please include 25¢ packing & postage.

If you want
Power, Easy starting, Dependability

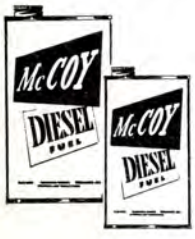


...you want the McCOY "9" DIESEL

- *O-ring for compression seal*
- *Positive compression screw lock*
- *Super efficient fuel induction*
- *Greater power at any RPM*
- *Low weight, high strength*

AMERICA'S FIRST MODERN DIESELS—Dick McCoy and factory engineers were first to introduce revolutionary Diesel design changes... features that made the McCoy .049 Diesel the most sensational engine in the field. That's why this new, larger McCoy "9" is another excitingly powerful Diesel.

EASY FLYING—No batteries, no glo plug, no wiring. Just fill the tank and flip the prop.



THE RIGHT FUEL—Proven best in flight tests for all Diesels—foreign and domestic. Use McCoy Diesel fuel and get championship performance.

Half Pints **50c**

Pints **90c**

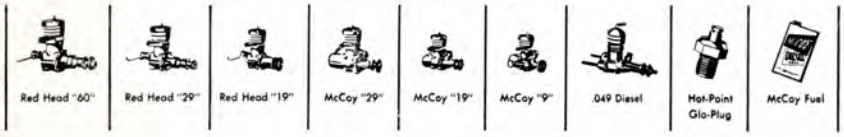
$7.95

Complete with fuel tank

actual size

The Sky's Full of McCoys

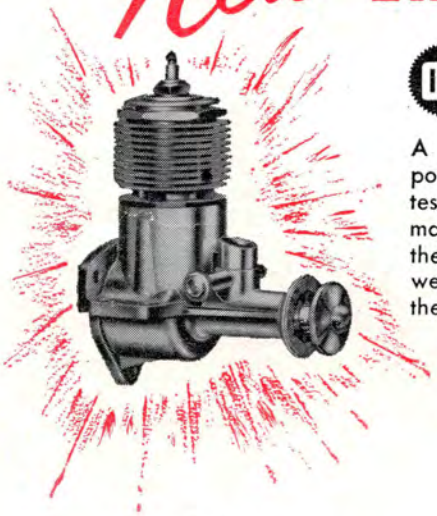
The famous checkered flag line



McCOY®
PRODUCTS COMPANY
8509 Higuera Street
Culver City, California

Announcing 2 New OK Winners!

1 New Engine



OK CUB .19

A WINNER . . . FOR POWER! This powerful new Cub is ideal for contest entries. Engineered to provide maximum Class A performance. Has the highest output on a power/weight ratio of any engine now on the market!

Displ.	.199
Bore	.655
Stroke	.590
Weight	2⅞ oz.

$8.95
As illustrated

To make sure your Cub's a winner, always use "OK" Glow Fuel. A methanol-base fuel with extra punch. Assures quick firing, complete combustion — leaves no varnish or residue.

85¢ Pint

2 New Kit

OK CUB .049B POWER KIT

A WINNER . . . FOR PRICE! Enjoy the thrill of assembling your own engine—and save money at the same time! Kit contains all the parts you need and easy-to-follow instructions.

only $3.95

SEE YOUR DEALER . . . Or write us direct

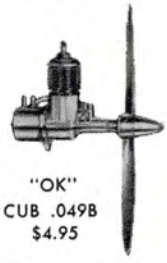
For PRICE, POWER, and PERFORMANCE

17TH ANNIVERSARY OK 1937 ★ 1954

A Complete Line of PROVEN Miniature Engines and Accessories

"OK" GLOW FUEL
"OK" DIESEL FUEL
Pint 85¢

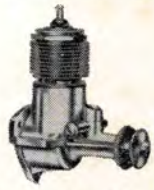
"OK" GLOW PLUGS
Short or long — 59¢



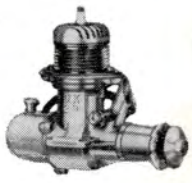
"OK"
CUB .049B
$4.95

"OK" CUB .074
$5.95

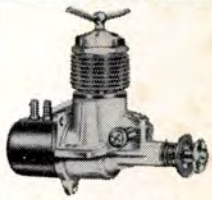
"OK" CUB .099
$6.95



"OK" CUB .14
$7.95



"OK" HOTHEAD
$10.95



"OK" CUB DIESELS
.049 $5.95
.075 $7.50

"OK" COMBINATION PACKAGES
CUB .049x.....$5.75
CUB .074 .....$6.75
CUB .099 .....$7.75

HERKIMER TOOL & MODEL WORKS

78 Harter St. Herkimer, N. Y.